Oil, Paint and Drug Reporter

THE CHEMICAL MARKET AUTHORITY

February 15, 1960

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Oil, Paint and Drug Reporter

Vol. 177 No. 7 30 Church St., New York 7, N. Y. February 15, 1960

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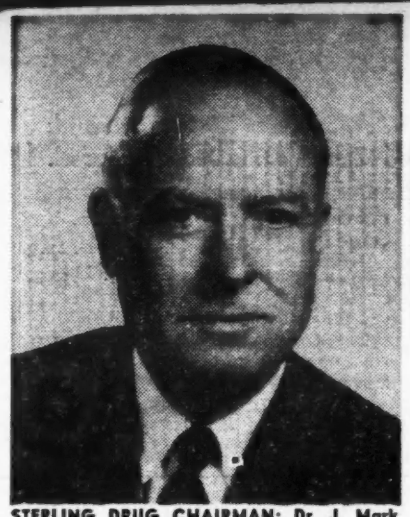

STERLING DRUG CHAIRMAN: Dr. J. Mark Hiebert, president of Sterling Drug, Inc., New York, who has been elected to the additional office of board chairman. He succeeds the late James Hill, jr., who died suddenly in Paris on January 27.

Rohm & Haas Buys Gov't Butadiene Unit

Rohm & Haas Company has finally relieved the government of its Louisville, Ky., butadiene plant. The Philadelphia concern has reportedly picked up the works for the tidy sum of $6.1 million as a result of opening of filed bids February 9. There were five other bidders.

Dr. F. O. Haas, president of R&H, says that the company plans to use the 139-acre site as the location for a new plant to manufacture products already made by the company.

Location of the plant at Louisville would fit in with long-range plans Rohm & Haas is known to have for putting up manufacturing facilities near its midwest customers. The company reportedly owns a tract of land in Illinois as well, which it purchased in 1953.

Dr. Haas stresses that Rohm & Haas has no plans to use the plant to produce butadiene, and has no intention of getting into the business.

Tired of having a white-elephant type operation on its hands since 1953, the government put the plant up for sale in December with no strings attached (OPD, 12/21/59).

Until that time—since 1953 when it first tried to peddle the plant—the government stipulated that it must be held available to produce butadiene from ethyl alcohol. The chemical industry backed away, deeming this uneconomical, and Publicker Industries, Inc., was hired as custodian.

The plant in its heyday could make 87,000 tons of butadiene a year from alcohol, and cost the government $30 million to build.

Overseas Investment Hike Sought Through Tax Break

House ways and means committee, if it has its way, wants to give chemical investors overseas a break. The group has formally approved a bill (HR 5) to encourage investment overseas by easing US income taxes on money earned abroad.

In the same closed session, the committee approved a separate measure dealing with income earned by US companies in foreign nations that had previously been knocked out of the major bill.

The main legislation, sponsored by Rep. Hale Boggs of Louisiana, would permit American industries to set up in the US special subsidiaries, called foreign corporations, to operate abroad. These subsidiaries could delay payment of income taxes until their earnings were brought back to this country.

Food Additives Safety Termed Question That Needs Answering By Scientists, Not Congressmen

Questions on the safety of food additives should not be settled by congressional edict. Whether a color or other substance added to food is likely to induce cancer in man or animal is a matter that should be left to the judgment of a group of competent experts. If the Washington lawmakers think they have the final answer to this thorny question, they are mistaken: Their solution fails to leave any room for administrative discretion or scientific recommendations.

Such is the view of the Manufacturing Chemists' Association on the Delaney anti-cancer clause, the most controversial provision in the pending color additives legislation.

Testifying before the house interstate commerce committee as it resumed hearings last week on the color bill, MCA firmed up its position on the emotion-charged cancer issue.

Against Singling Out of Cancer

The chemical association made it abundantly clear that it is flatly against the singling out of cancer for any special mention—either in the color measure or the food additives law.

As matters now stand, MCA warned, the mandatory ban on carcinogens is threatening to deter further research on the quest for safe levels of use for all food additives.

As the hearings progressed, there were two other important developments that crowded their way into the limelight:

- The drug industry and the canners attacked the scope of the color bill on the grounds that it goes beyond what is necessary in the field of control over use of colors (see story at the right).
- A letter from Arthur Flemming, Secretary of the Department of Health, Education & Welfare, gave his interpretation of the proposed law: It is not intended to cover colors in food wraps that do not migrate to the food nor to cover pesticides which have a secondary effect of imparting color to raw agricultural products.

The packaging industry had expressed fear that the legislation might be construed to apply to color materials used in food wraps even when the color did not

—Continued on page 63

HEADS RCI'S VARCUM UNIT: O. Jay Myers, named acting general manager of its newly-formed Varcum Chemical Division by Reichhold Chemicals, Inc., White Plains, N.Y. In addition, Mr. Myers continues as vice-president in charge of RCI's foundry and abrasive products division.

Catalin Acrylic Plant Now Going Full Tilt

Catalin Corporation of America has begun full-scale production at a new 10-million-pounds-per-year acrylic plant in Fords, N. J. The plant's design and equipment is based on mutual exchange of technical information between the New York firm and Union Chimique Belge, SA, of Brussels, Belgium.

Mindful of the increasingly diversified end-uses of acrylics, Catalin says it has designed the facility for maximum flexibility in production.

A wide variety of emulsions and solutions will be turned out for consumption in paints and coatings, textiles, paper, leather and adhesives.

Built into the plant's design, Catalin reports, is a considerable expansion potential. With space and supporting equipment already available, new reactors could be installed on short notice to step up the output.

Allied Tells Capacity Boost For Melamine, Urea Resins

Allied Chemical Corporation has just doubled capacity of its melamine and urea molding compound facilities at Toledo, Ohio, the New York firm reports.

Full-scale production of 45 million pounds in the new facility will probably not be reached until the late 1960's, except when needed to meet short, seasonal demands. Total capacity—both the old and new facilities—will be 90 million pounds, when going full blast.

Plastic dinnerware, now accounting for about 90 percent of the melamine market, is uppermost in Allied's mind as it makes this boost.

Produced by thirty companies in this country, melamine dinnerware constitutes nearly one-quarter of all dinnerware sold.

The expanded plant at Toledo is reported to have storage facilities for 7 million pounds of finished melamine and urea.

Folic Complaint Rejected

The Treasury Department has rejected a complaint that imports of Japanese folic acid are being dumped on the US market. The department said that investigation shows imported folic is not being sold on the domestic market at less than fair value as defined in the anti-dumping act.

Color Additives Hearings Face Up To Old Chestnut

Should food additives legislation transgress the bounds of "safety" and tread upon the field of "functional values"? This old chestnut has bobbed up again in the house interstate commerce committee—this time in connection with color additives legislation.

Dismayed that the controversy wasn't settled by passage of food additives legislation two years ago, drug and food canners industry representatives charged last week that the administration's color additives bill attempts to cover matters regarding chemicals that have no relation to "safety." They should not be allowed, the industry witnesses contended.

The charges brought a prompt promise from acting chairman of the committee, Rep. John Bell Williams of Mississippi, that this would be looked into closely and if found to be the case, the bill will be modified if he has anything to do with it.

What Power HEW Should Have

He said he was against giving the Secretary of Health, Education & Welfare authority to pass on anything except the safety of colors under the provisions of the proposed law.

The most pointed attack on this authority came from Paul Gerden, general counsel of Abbott Laboratories, North Chicago, Ill., and H. E. Dunkelberger, of the National Canners Association.

In a letter to the committee commenting on this and other sections of the bill, the Pharmaceutical Manufacturers Association also questioned the advisability of extending the secretary's authority into this area.

Mr. Gerden noted that a series of subparagraphs of section 706 of the bill makes reference to "suitable and safe" for use in connection with colors that are to be listed for use.

Nowhere does the bill indicate how the secretary is to determine whether a color additive is "suitable," he said.

If this adjective connotes something other than safety, it is undesirable in this legislation, he added, and if it refers only to safety factors, it is redundant.

Similarly, he said, another section provides that the secretary shall not list an additive for a particular use unless he thinks that the additive, if used within a safe tolerance, "would achieve the intended physical or other technical effect."

"These provisions introduce a kind of functional value test that has no proper place in a public health measure," Mr. Gerden stated. "The intended 'physical'

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Vinyl Chloride Monomer Facility Planned by Ethyl

Ethyl Corporation, New York, intends to erect a vinyl chloride monomer plant at its manufacturing center in Houston, Tex.

The Houston facility is being built to supplement Ethyl's vinyl chloride monomer installation at Baton Rouge, La., and to provide increased future capacity for the growing polyvinyl chloride industry.

Construction work on the Houston vinyl chloride unit is expected to start soon, with completion scheduled for early 1961.

Corned Beef & What? Perfume, Naturellement

Corned beef may go well with cabbage, but it's also an excellent companion-piece to perfume. At least, that's the thinking of International Products Corporation, which has just acquired Parfum Lorle, Inc., of New York.

Parfum Lorle, which is expected to sell more than $500,000 worth of toiletries this year, operates a 20,000-square-foot plant at Middlesex, N.J.

A producer of corned beef, meat by-products and quebracho extract, International is a New York concern with large ranch holdings in Paraguay which hopes to integrate the acquired toilet goods line—particularly soap, which can be made from the by-products of its packing plants—into its own operation.

Lead, Zinc Men Find Seaton Still Sitting on Curbs

Domestic smelters and foreign exporters have just had their hopes dashed regarding a possible lifting of import curbs on lead and zinc.

The dashing came about last week at a press conference when Secretary Fred A. Seaton, of the Department of the Interior, threw his weight behind the administration, congress and the domestic producers. He strongly backed the curbs.

Present restrictions—put into effect a year ago last November—have led to slow but consistent progress for domestic industry, the secretary feels.

In the three months before quotas were allocated to the metals, Mr. Seaton notes, production was at an annual rate of 239,000 tons of lead and 353,000 tons of zinc. Based on the last quarter of 1959, lead output has jumped 5 percent, and zinc a full 35 percent, the secretary points out.

In December alone, zinc output was at an annual rate of 475,000 tons. It would have been 4,000 tons higher, according to Mr. Seaton, had part of the industry not been shut down by strikes.

Pricewise, the curbs have brought no hardship to domestic consumers, in h's view. After showing slight increases when the restrictions went into effect, quotations have since stabilized.

The full impact of controls will be felt during the balance of this year when producers seek to move excess stocks, Mr. Seaton says.

Import curbs on lead and zinc, he declares, should be continued at least beyond 1960.

Mr. Seaton's press conference also brought good tidings for the oil industry. The secretary backed up oil import curbs, declaring they should be continued for "the foreseeable future."

PMA Leader Replies to Critics: More Drugs for the Average Man

The Russian welfare state is a "farewell state" as far as pharmaceuticals are concerned; the Soviets, since their revolution forty-two years ago, have not made a single, major drug discovery. On the other hand, the United States, under free and aggressive competition, has placed more drugs in the hands of the average man than all the government-controlled systems of all other countries combined. Such, in essence, is the defense of the American drug industry as formulated by Dr. Austin Smith, president of the Pharmaceutical Manufacturers Association.

Dr. Smith came to the industry's defense last week with two major speeches, delivered in Chicago, in an apparent counter-attack on the Kefauver anti-monopoly committee which has been probing the drug makers. His addresses were delivered at the central regional meeting of PMA and before the Midwest Pharmaceutical Advertising Club.

Cites Value of Drug Industry

Hammering hard to establish the pharmaceutical people's value to the country, Dr. Smith contended:

"The facts show that the drug industry has provided America with incalculable benefits in the past twenty years at no relative increase in the price of drugs."

Dr. Smith's defense ranged over the whole field from advertising and promotion, through drug prices and industry profits and then on to competition.

Turning to the critics who say the drug industry spends too much on advertising, Dr. Smith said, "I cannot . . . reconcile the charges that the drug industry is not competitive with the angry attack on advertising and brand names promotion."

"Advertising and promotion are not only clear evidence of competition, but they are also primary means of competing," Dr. Smith went on. "Destroy them and you effectively hamstring the very competition from which all our progress has stemmed and for which our critics express profound admiration."

He cited Bureau of Labor statistics figures to prove that manufacturers' prices

—Continued on page 62

Lignosulfonate Users Hear of New Supply

The word is going out to lignosulfonate consumers: 100,000 pounds of new daily capacity is set to come on stream in April.

American Can Company's Marathon Division says that the new facilities will make it one of the top lignosulfonate factors.

Spray dryer and other processing equipment will extract the material from spent sulfite liquor at the company's Green Bay, Wis., pulp and paper mill.

Among end-uses that have come into prominence: vanillin, drilling fluid dispersants, industrial cleaners, gypsum slurries, dyestuffs, pesticide formulations, water-reducing agents, retarders in concrete.

Color Migration Study Is Planned by SOCMA

They wonder where the color went. Or if it went anywhere. The wonderers are Synthetic Organic Chemical Manufacterers Association and two important groups from the paper industry.

What they are wondering about is whether color in paper wrappings and paper board can migrate into foodstuffs. They are about to hold a conference, at the invitation of SOCMA, to consider a series of tests on an industry-wide basis to see if any dyes do get into food.

The paper industry is being represented by the food additives liaison committee of the American Paper & Pulp Associa-

—Continued on page 35

Johns-Manville Stepping Into Plastic Pipe Activity

Johns-Manville Corporation has expanded into the plastic pipe field. The New York firm last week agreed to acquire Franklin Plastics, Inc., Franklin, Pa., in a cash transaction.

A producer of plastic pipe for six years, Franklin Plastics currently has sales running at about $1.5 million a year.

The company sells three types of extruded pipe: polyethylene, styrene and acrylonitrile-butadiene styrene.

Used heretofore primarily in the agricultural field, plastic pipe is now broadening into the chemical industry.

Pitts. Plate, Dutch Concern Join in Fiber Glass Project

Pittsburgh Plate Glass International and a Dutch company—Algemene Kunstzijde Unie NV—are teaming up to build a continuous fiber glass yarn plant, to be located in Western Europe.

After preliminary work, a facility will be erected on a still-to-be-selected site—most probably in Holland—which will be jointly controlled by the two concerns.

AKU, with headquarters in Arnhem, Netherlands, is a leading world producer of such synthetic fibers as rayon, nylon and polyester fibers.

Pittsburgh Plate Glass Company, Pittsburgh, Pa., of which PPG International is a wholly-owned subsidiary, has been engaged in glass manufacture since 1883.

It has been a producer of fiber glass products since 1952 and has a patent position and technical know-how in textile fibers.

The Week's Price Changes

Cash Lard, Refined Candelilla Wax, Soybean Meal Advanced. Carnauba Wax, Corn Oil, Linseed Meal, Vanilla Beans Reduced.

Prices Advanced

Candelilla wax, refd., 6c. to 7c. per lb. (p. 56).
Lard, cash, 1/10c. per lb. (p. 56).
Soybean meal, 50c. per ton (p. 56).

Prices Reduced

Carnauba wax, yellow, 4c. per lb. (p. 56).
Coconut oil, ¼c. per lb. (p. 56).
Copra, $2.50 per ton (p. 56).
Corn oil, crude, 1c. per lb. (p. 56).
Refd., 1c. per lb. (p. 56).
Grease, choice, white, ½c. per lb. (p. 56).
Linseed meal, $1 per ton (p. 56).
Oiticica oil, ½c. per lb. (p. 56).
Peanut oil, crude, ¾c. per lb. (p. 56).
Refd., ¾c. per lb. (p. 56).
Soybean oil, crude, ¼c. per lb. (p. 56).
Refd., ¼c. per lb. (p. 56).
Vanilla beans, Bourbon, 75c. per lb. (p. 51).
Mexican wholes, 75c. per lb. (p. 51).
Mexican cuts, 75c. per lb. (p. 51).

OPD Price Index

THE OIL, PAINT AND DRUG REPORTER'S relative record of prices of chemicals and related materials is currently as follows:

(100=1949 average)

Feb. 12, 1960	Feb. 5, 1960	Feb. 13,1959
111.48	111.56	111.10

Chemical Laws Wisconsin's Aim

The State of Wisconsin, none too happy when it recalls the way the federal government handled the big cranberry scare last Thanksgiving, has decided to step into the chemicals-in-foods picture with a set of regulations all its own. One reason Wisconsin has suddenly come up with a great interest in the matter is that it is the country's second largest producer of cranberries, to say nothing of its leading position as a produce of milk products and other farm commodities.

As Gov. Gaylord Nelson says, "The public alarm generated recently over the contamination of cranberries by the chemical aminotriazole has focused attention on this problem. It is sure to become increasingly acute."

Implementing his ideas on the matter, Gov. Nelson has just appointed a committee of scientists, medical experts and agricultural leaders and given them a special assignment: "Develop a decisive and consistent public policy in respect to regulating the use of chemicals in feed supplements, food additives, pesticides, weedicides and growth regulators."

Mindful that his state produces 32 percent of the nation's cranberries—second only to Massachusetts' 48 percent—the governor says that public policy has not been "clear and consistent" in the general area of chemicals in foods.

He adds that the extreme hardship suffered by the cranberry industry demon-

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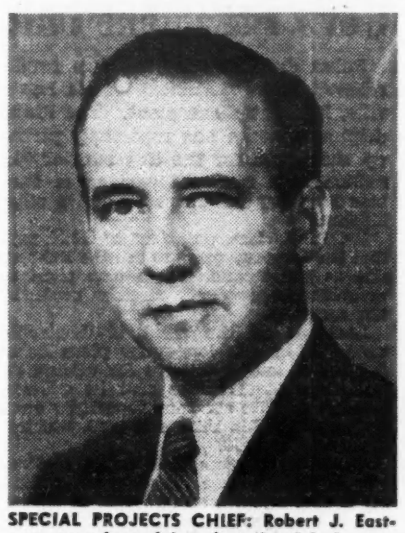

SPECIAL PROJECTS CHIEF: Robert J. Eastman, named special projects head in its new marketing planning department by Pennsalt Chemicals Corporation, Philadelphia.

Interior Picks Two Sites For Water Desalting Units

Department of the Interior has selected sites for two brackish water conversion demonstration plants. The facilities will be constructed under the government's saline water program.

One will be located at Webster, S. D., and the other at Roswell, N. M., Interior reports.

The Webster plant will utilize an electrodialysis process designed to produce fresh water at an anticipated rate of 250,000 gallons a day.

A forced-circulation vapor compression distillation process designed to turn out at least 250,000 gallons a day will be erected at Roswell.

Pesticides Close the Year With Their Trends Mixed

Carryover stocks of leading pesticides showed mixed trends with the close of the crop year—September 30, 1959. So reveals the annual survey conducted by the Department of Agriculture and the National Agricultural Chemicals Association.

Substantially pared were supplies of benzene hexachloride, calcium arsenate, 2,4-D, 2,4,5-T, organic phosphorus insecticides and copper fungicides. Carryover

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OIL PAINT AND DRUG REPORTER, Vol. 177, No. 7, February 15, 1960. Published weekly on Monday except semi-weekly the last week in February and the last week in August by Schnell Publishing Company, Inc., 30 Church Street, New York 7, N. Y., U.S.A. Second-Class postage paid at New York, N. Y. Single copy price: 50 cents. Subscription prices:—United States and Possessions, $5 a year; Canada and Newfoundland, $7; other countries, $12. **Copyright, 1960, Schnell Publishing Company, Inc.**

K Rations—With Enzymes

Tasty K rations?

A research project that was begun to provide the soldiers in Korea with more palatable dehydrated cabbage may soon be utilized to put the garden-picked flavor back into all processed foods.

Evans Research & Development Corporation of New York has been granted a patent for a process whereby enzymes may be added to canned, frozen, dehydrated or even irradiated foods so that they taste fresh.

Why do enzymes add freshness?

To simplify a complex natural phenomenon, flavor enzymes are the spark plugs of the flavor machinery. Essentially, they release the flavor that occurs naturally in food stuffs. The usual methods of processing food, however, inactivate most of these enzymes. Hence, canned peaches taste 'canned' and dried beans taste 'dried.'

Evans Research, therefore, decided that processed food would taste more like fresh food, if enzymes identical to or similar to the inactivated ones could be added to the food after it had been processed.

They learned that they could extract pineapple enzymes, for instance, from the green stalk, cook the pineapple, add the extracted enzymes, can the fortified pineapple and delight the housewife with pineapple that tasted as though it had just been picked and cooked.

That's the general principle. The specific utilization of the flavor enzymes will vary according to the food and the type of processing. One commercial application might be in the actual processing of the food, another in the packaging and still another as a powder which may be sprinkled on the food before serving.

This applies to a wide variety of processed foods such as stringbeans, cabbage, broccoli, horseradish, ba-

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Polyethylene Producers Gear Up To Meet Possible Powder Bonanza

Polyethylene producers are gearing up to produce finely-divided powders for expected booming demand in the near future. Why? One reason is that Spencer Chemical Company has brought into this country a process developed by Thomas Engel, of Germany, in which articles as large as boats and bathtubs can be fabricated from thermoplastic materials, such as polyethylene, polypropylene and nylon. Following on the heels of the Spencer announcement that it has sewed up the Engel process for this country, US Industrial Chemicals Company disclosed last week that it is coming out with two types of powdered polyethylene—to be produced at a 2-million-pound-a-year unit in Tuscola, Illinois.

RESEARCH DIRECTOR: Dr. J. William Haun, appointed director of physical research at the central research laboratories of General Mills in Minneapolis, Minn.

The New York-based division of National Distillers & Chemical Corporation is offering a fine powder (smaller than 200 mesh) produced by a solution process based on know-how of Technoplast Spindler, of Switzerland.

Ground Powder Also Offered

Also being offered is a coarser powder (50-200 mesh) based on European developments in grinding and screening. A key element in this process is a Pallmann pulverizer.

It's indicated that the same type of equipment will be used by Spencer in producing its own brand of polyethylene powders via the grinding process at its Orange, Tex., plant.

The Kansas City, Mo., company is building a pilot plant at Orange which is slated to serve three main functions:

- To develop improved grades of powdered polyethylene.
- To demonstrate the process.
- To give technical assistance in product development.

Generally, the Engel process involves the fusing of a powdered thermoplastic in an oven. It can be used to form hollow

—Continued on page 54

Additive Extensions To Twelve Chemicals

Makers of a dozen chemicals used in foods are being given an additional year's time—until March 6, 1961—by the Food & Drug Administration to provide the necessary technical data to obtain tolerances under the food additives law.

In granting the extension, the agency emphasizes that "no undue risk to the public health is involved" and that conditions exist which make it necessary to

—Continued on page 63

Chromalloy Corp. Doubling Its Organic Nitrate Capacity

Chromalloy Corporation is under way on a program to double production capacity for organic nitrates used in solid rocket propellents. The project involves addition of facilities to the company's Propellex Chemical Division nitrate plant in Edwardsville, Ill.

Since the nitrate plant went on stream last fall, demand has far exceeded expectations, a spokesman for the company says.

Chemical Industry Is Seeking Industrial Relations Milestone: A Plant-Wide Bargaining Basis

The chemical industry is asking the National Labor Relations Board for a major change in its policies on recognition of collective bargaining units to establish the basic chemical manufacturing industry as one of those in which bargaining on a plant-wide basis may be the universally applied rule. Only four other industries now have the benefit of this policy—steel, lumber, aluminum and wet milling. If extended to the chemical industry, leaders report that a "milestone in chemical industrial relations" will have been passed.

At the present time, collective bargaining units in the chemical industry are determined pretty much on a case-by-case basis. In some instances, it is on a craft basis with probably several collective bargaining units recognized in a single plant.

Situation Makes for Instability

In some other cases, entire plants are covered by a single collective bargaining contract. Insofar as management is concerned, the situation makes for instability that should not be forced on the industry.

The opportunity to seek a change in the situation came recently when the Supreme Court of the United States refused to review a Fourth Circuit Court of Appeals case in which a refusal by Pittsburgh Plate Glass Company, Pittsburgh, Pa., to deal with a craft union at its Cumberland, Md., plant was upheld over the objections of the government.

Using this as a precedent, E. I. duPont de Nemours & Co. has asked the board to turn down a union-sponsored craft severance petition at its Houston, Tex., plant.

The entire chemical industry has been brought into the case by an action of the board late last month granting the Manufacturing Chemists' Association the right to intervene in the form of *amicus curiae*.

Last week MCA filed an extensive brief with NLRB asking that it shake loose from the old rule and recognize the fact that production conditions in the chemical industry are just as integrated as are those in the four "favored" industries.

The main point at issue is whether the so-called National Tube Doctrine should be extended to the chemical industry. This doctrine was established in 1948 and forbids the splitting of craft unions from an overall plant bargaining unit so that each may conduct separate negotiations with the employer, but only in the steel, wet milling, lumber and basic aluminum industries.

With the American Potash & Chemical Corporation spearheading the drive, an attempt by the chemical industry to get

—Continued on page 44

Gov't Rests Oil Case; Defense Asks Dismissal

The government has rested its conspiracy and price-fixing case against twenty-eight oil companies and one chemical firm. As defense attorneys were preparing to file briefs moving for dismissal in Tulsa, Okla., last week, US District Judge Royce H. Savage expressed doubt that the government's charge of a general conspiracy had been proved.

He did not rule out, however, the possibility that charges of "smaller conspiracies" might stick.

This would depend, he said, on whether the antitrust laws can be shown to apply to the relationship of a parent company and its affiliates. In cases of wholly-owned subsidiaries, the judge said, he couldn't see "how they could operate if the right hand didn't know what the left hand was doing."

Where the parent company owns less than 100 percent of the affiliate's stock, the question of possible violations arises, he noted.

The judge cited several relationships among the defendants that fall into this

—Continued on page 37

BUTADIENE MANAGER: Dr. Paul S. Stutsman, elevated from assistant to the president to manager of butadiene operations by Texas-US Chemical Company, New York.

Borden Inks in Plans For New Ink Holdings

Borden Chemical Company says it has big expansion plans for its newly-acquired Commercial Ink & Lacquer Company, with plants at Fair Lawn, N. J. and Whitehouse, Ohio. Borden says plans have been made for an initial expansion and development program involving both installations.

With the acquisition, the Borden Company division will be in a position to supply the paper converter field with a complete line of adhesives for laminating and fabrication, chemicals for coating, and now inks for printing paper, a spokesman for the New York firm declares.

The new unit will be known as the ink and lacquer department and will be managed by James A. Wold, who was formerly manager of the company's consumer products and resinite departments.

Aside from Mr. Wold's appointment, no

—Continued on page 38

Coking Unit On Stream At Suntide Refining Co.

Suntide Refining Company, a subsidiary of Sunray Mid-Continent Oil Company, has placed a new $3-million delayed coking unit on stream at its Corpus Christi, Tex., refinery.

The unit incorporates the new "Electrik Tel-O-Set" control system which transmits process information at the speed of light, according to an announcement by the Tulsa, Okla., company.

Capacity is rated at 7,000 barrels daily of high-quality petroleum coke, propane, propylene, butane-butylene, gasoline and gas-oil.

▶ HOW IS DYESTUFFS BUSINESS SHAPING UP?

THIS ISSUE—See OPD's exclusive statistical report on the industry, a tally of fourth-quarter sales figures (page 9).

Kefauver May Be Out of Gas, But He's Not Out of Money

If, as some wishful thinkers in the pharmaceutical industry believe, Sen. Estes Kefauver and his drug-price probers "are running out of gas," they won't be running out of money—not this session of congress, anyway.

The senate has made sure of that, last week voting to give the antitrust and monopoly subcommittee another $425,000 to continue its investigations into "administered" prices—in the drug and other industries.

Though Sen. Everett McKinley Dirksen of Illinois, the Republican leader in the upper house, has made no secret of his disapproval of the methods employed by the subcommittee's staff, an expected fight to curb some of the unit's activities failed to materialize on the senate floor during consideration of the appropriation.

The Tennessee lawmaker got the money for his pricing inquiry, despite the fact that some senators indicated that they are not quite satisfied with the amount of legislation that has been turned out by the Kefauver subcommittee for all the money it has spent over the years.

Two pieces of legislation, reported last session by the senate judiciary committee, have emanated from the antitrust and monopoly subcommittee.

One is a bill to make final orders of the Federal Trade Commission under section 11 of the Clayton act. This was passed by both houses and signed into law.

The other measure gives the Attorney General power to demand evidence in civil antitrust cases, instead of requiring him to go through the grand jury procedure. This bill was approved by the senate, but has been stalled in the house.

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AMMONIA INSTITUTE HEAD: Carl J. Bauserman, head of Southern Michigan Nitrogen Company, Richland, Mich., who has been elected president of the Agricultural Ammonia Institute.

East Germans Foresee Doubling in Chemicals

A doubling of chemical production by 1965 may sound like a tall order or a tall propaganda tale. But that's what East Germany says it is going to do. Under terms of a seven-year plan, beginning in 1958, the Russian satellite hopes to sail into a big-time chemical orbit.

Polyvinyl chloride output will be raised from 54,500 tons in 1958 to 126,000 tons by '65, if the regime has its way. Placing a priority label on plastics, the East Germans plan to install 50,000 tons of polyethylene capacity within the next five years.

Synthetic fiber output will be increased six-fold, with emphasis on various wool-like fabrics: "Wolcrylon," "Pralana" and "Lanon."

New facilities for production of "Pralana" are slated for the Friedrich Engels industrial complex at Premnitz. A new plant will be built at Guben with a yearly capacity of 14,000 tons of fiber.

Liquid fuels required by this ambitious plan will be provided by a new plant to be built in Schwedt-on-Oder. It will get its raw material via a pipeline from Soviet oil fields.

In the agricultural chemicals field, the regime hopes to double output of phosphatic fertilizers. Nitrogenous fertilizers are to increase substantially, the Reds say.

Coleman Named to Head New Sulfur Organization

Dr. Russell Coleman has been named president of Sulphur Institute, a newly-organized international research group.

Dr. Coleman, executive vice-president of the National Plant Food Institute since its formation in 1955, will assume his new duties March 1. He will be located at the sulfur organization's Washington, D. C., headquarters.

Dutch Chemicals Expansion Dynamic, Though Not as Rapid As Rest of Western Europe

The Dutch chemical industry may not expand as rapidly as its powerful Western European neighbors this year, but the pace will be dynamic enough. That's the gist of Business & Defense Services Administration's latest survey on the situation abroad: a blow-by-blow account of Dutch chemicals output and prospects. Helping the Dutchmen to keep pace during the year's mad scramble to expand will be the continued massive influx of Yankee capital, know-how and plants, BDSA says.

As the common market was taking form last year, US chemical men raced abroad and invested more cash in Netherlands chemicals during the first half of the year than in all previous years combined.

Start of the year saw an American "Orlon" plant established at Dordrecht, involving an investment of 20 million guilders, which works out to better than $5 million (1 guilder equals 26.3 cents).

New Organics Plant in the Works

Still in the planning stage, but expected to be in production early next year, is an installation for producing organic chemicals and intermediates. Jointly-owned by US and Netherlands interests, the plant is expected to stress intermediates for plasticizer production.

This facility, says BDSA, will go a long way toward balancing the Dutch chemical picture, which up to now has been very weak on intermediates.

Among other recent trans-Atlantic investments and expansions:

- An expansion by the Haarlem subsidiary of Merck Sharp & Dohme Division of Merck & Co. Costing 3.5 million guilders, the new facilities will permit production of chlorothiazide, a recently-developed anti-edema drug.
- A 13-million guilder carbon black plant, slated to come on stream near Rotterdam this summer. Though built by a local firm, the facility will get its technical know-how from Godfrey L. Cabot, Inc., of Boston.
- A new platinum catalyst plant built by the local firm, Ketjen Sulphuric Acid Works, in cooperation with American Cyanamid Company.

Turning to the production picture, BDSA reports that in 1958, the last year for which figures are available, the country's chemical output showed only a 2 percent increase, as against an average

—Continued on page 44

Sulfuric Acid Installation Due to Go Up in Norway

Bleikvassli Gruber A/S of Oslo, one of Norway's major lead and zinc producers, plans to build a 40,000-ton sulfuric acid plant in the northern part of the country.

The $1.4 million facility, which is slated to get into production in 1961, will be based on pyrites—available in large quantities as a by-product of lead and zinc operations.

At present, the four Norwegian sulfuric producers turn out about 100,000 tons of acid a year. Another 10,000 tons of sulfuric acid is imported annually.

WARNER-CHILCOTT EXECUTIVE V.P.: Robert B. Clark, elected to the newly-created position of executive vice-president for Warner-Chilcott Laboratories, ethical drug division of Warner-Lambert Pharmaceutical Company, Morris Plains, N.J.

Chemical Plants Set For Erection in USSR

An acetylene plant and two ammonia units have been slated for construction in the Soviet Union. Techmashimport, a Soviet agency, has been licensed to use processes owned by Societe Belge de l'Azote et des Produits Chimiques de Marly. The Belgian firm will also carry out the engineering and supply equipment for the facilities.

In a related development, the Japanese government has just given the go-ahead for Japan's first acetylene-ethylene unit. It authorized an agreement signed recently by Societe Belge and Sumitomo Chemical Company, Ltd., under which Societe Belge will design and build the plant.

Feed stock for the Japanese unit will be liquid hydrocarbons.

Chlorine-Caustic Unit Grows

Stauffer Chemical Company, New York, is expanding its chlorine-caustic plant at Henderson, Nev. Scheduled for completion by May, the expansion will increase output of the Henderson unit by about 25 percent.

Research Tempo Seen Stepped Up By Central Plan

Chemical and drug research could move ahead faster if directed at specific goals through a program of "planned research." That's what Dr. Karl Folkers, executive director of fundamental research for Merck Sharp & Dohme Research Laboratories, told the American section of the Society of Chemical Industry last fortnight.

Occasion of Dr. Folker's speech was an award dinner at the Waldorf-Astoria hotel in New York, where he was presented with the 1960 Perkin medal.

Citing the vast war-time increase in scientific knowledge, Dr. Folkers said that when the goal is given "the scientist will direct his mind and energy to significant and specific objectives."

He contrasted this type of research with "basic research for new knowledge." But the latter, he hastened to add, is equally essential and should also be stepped-up.

More Planned Research Urged

"I am only suggesting," he said, "that more planned research might increase our rate of discovery."

New methodology, Dr. Folkers pointed out, provides another way to improve research progress. He recalled how Merck's initial research on purification of the anti-pernicious anemia factor was partly motivated by the desire to test the technique of chromatography. Chromatographic purification was an essential step in the isolation of pure crystalline vitamin B_{12}.

Other new techniques cited by Dr. Folkers:

- Proton nuclear magnetic resonance used in elucidation of the structure of co-enzyme O.
- Use of mass spectrometry to determine molecular weights of volatilizable organic compounds.

Studies carried on with experimental animals, Dr. Folkers believes, might profit by use of primates in place of rodents in many cases. Conceding the invaluable work that has been done with rodents, he nevertheless feels that in nutrition research particularly the primate serves as a more valid model.

He backs up this assertion by reference to Merck's synthesis of vitamin B_6 and subsequent demonstration of its key role in human nutrition. This demonstration could only have been made with primates,

—Continued on page 44

Dow Forms Italian Firm, Weighs Polystyrene Facility

Dow Chemical International, Ltd., SA, has formed a new company, Dow Chimica Italiana SRA, at Milan, Italy. The wholly-owned subsidiary will open a marketing office next month in that city and plans soon to start construction of a multimillion dollar manufacturing plant.

Dow's "Styron" (polystyrene) is one of the materials getting consideration for production at the plant. Output will be moved to the West European market, Dow says.

Association Meetings

American Chemical Society, national meeting, Cleveland, Ohio, April 5-14.

American Institute of Chemical Engineers, national meeting, Atlanta Biltmore hotel, Atlanta, Ga., February 21-24.

American Oil Chemists' Society, annual meeting, Baker hotel, Dallas, Tex., April 4-6.

American Paper & Pulp Association, annual convention, Waldorf-Astoria hotel, New York, February 21-25.

American Zinc Institute, annual meeting, Chase-Park Plaza hotels, St. Louis, Mo., April 7-8.

Animal Health Institute, annual meeting, Shoreham hotel, Washington, D. C., April 17-19.

Association of Southern Feed & Fertilizer Control Officials, annual meeting, Riverside hotel, Gatlinburg, Tenn., June 21-22.

Chemical Market Research Association, consumer market research meeting, Lord Baltimore hotel, Baltimore, Md., February 17-18.

Chemical Specialties Manufacturers Association, midyear meeting, Drake hotel, Chicago, May 16-18.

Chemurgic Council, annual conference, Sheraton-Park hotel, Washington, D. C., March 16-18.

Commercial Chemical Development Association, annual meeting, Plaza hotel, New York, March 16-17.

Drug, Chemical & Allied Trades Association, annual dinner, Waldorf-Astoria hotel, New York, March 3.

Electrochemical Society, LaSalle hotel, Chicago, May 1-5.

Federal Wholesale Druggists Association, midyear meeting, Statler-Hilton hotel, New York, March 3-4.

Lead Industries Association, annual meeting, Chase-Park Plaza hotels, St. Louis, Mo., April 6-7.

Manufacturing Chemists' Association, annual meeting, Greenbrier hotel, White Sulphur Springs, W. Va., June 9-11.

National Petroleum Association, semi-annual meeting, Sheraton-Cleveland hotel, Cleveland, Ohio, April 20-22.

National Plant Food Institute, annual convention, Greenbrier hotel, White Sulphur Springs, W. Va., June 12-15.

Oil Trades Association of New York, Waldorf-Astoria hotel, New York, March 23.

Pharmaceutical Manufacturers Association, western regional conference, Ambassador hotel, Los Angeles, February 15-16.

Pharmaceutical Manufacturers Association, annual meeting, Boca Raton hotel and club, Boca Raton, Fla., April 4-7.

Pittsburgh Conference on Analytical Chemistry & Applied Spectroscopy, Penn-Sheraton hotel, Pittsburgh, Pa., February 29-March 4.

Society of the Plastics Industry, western sectional conference, New Riviera hotel, Palm Springs, Calif., April 8-9; Canadian section conference, London hotel, London, Ont., April 25-26; national conference and annual meeting, cruise on the Queen of Bermuda, May 7-13.

Southern Paint & Varnish Production Club, annual convention, Atlanta Biltmore hotel, Atlanta, Ga., March 16-19.

Stanford Research Institute, symposium on chemical reactions in the lower and upper atmosphere, Mark Hopkins hotel, San Francisco, April 18-29.

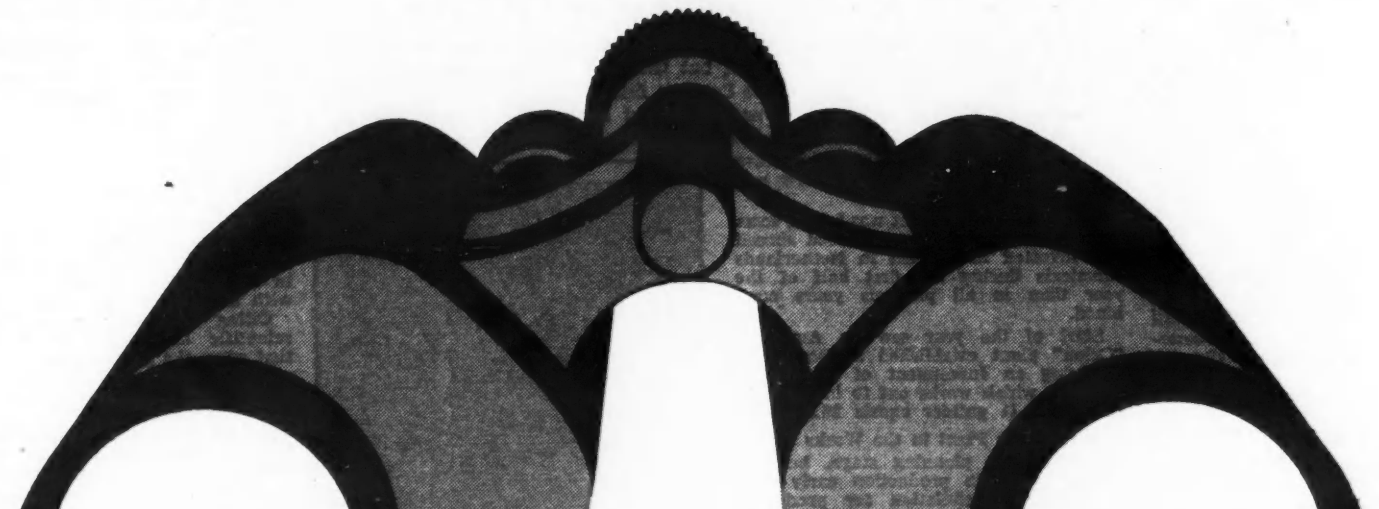
Synthetic Organic Chemical Manufacturers Association, monthly luncheon meeting, Roosevelt hotel, New York, March 15.

Technical Association of the Pulp & Paper Industry, annual meeting, Commodore hotel, New York, February 22-25.

Textile Research Institute, annual meeting, Commodore hotel, New York, March 24-25.

Toilet Goods Association, scientific section, spring meeting, Waldorf-Astoria hotel, New York, May 11; annual meeting, Poland Spring House, Poland Spring, Maine, June 27-29.

Weed Society of America, annual meeting, Cosmopolitan hotel, Denver, Col., February 22-25.



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Founded October 18, 1871 by William O. Allison
Directed 1900-1942 by Harry J. Schnell
EDITOR AND PUBLISHER: William S. Auchincloss
ASSISTANT PUBLISHER: J. Stuart Auchincloss
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SCHNELL PUBLISHING COMPANY, INC., 30 Church Street, New York 7, N. Y
(RE 2-9820) Cable Address: Reporter, New York
PRESIDENT: William S. Auchincloss
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Volume 177 February 15, 1960 No. 7

OPD REPORTS ON DYESTUFFS
How Business Is Shaping Up

	1959 Fourth Quarter Sales
Acid Dyes	$7,116,723
Basic Dyes	3,018,289
Mordant Dyes	2,112,115
Solvent Dyes	1,847,219
Vat Dyes	9,877,098
Total	$23,971,444

OPD's report of sales value is based on figures supplied by producers representing more than 80 percent of domestic output of the above dyestuff classes. The figure for acid dyes includes pre-metallized dyestuffs.

Teaming with Labor

Whatever may be one's appraisal of the beneficial potentialities of the joint-discussion conferences of management and labor on employment relations and problems, proposed by the head of national organized labor, "encouraged" by President Eisenhower, and approved, at least in some degree, by the leaders of national organizations of business, there is more than a little reason to believe that he will have some doubts relative to their successful practicability. Such a conclusion is inevitably to be derived from the differences which marked the policies and attitudes manifested in the contributions by official spokesmen for nationally organized labor and business to the proceedings of a hearing, February 4, by the Congressional Joint Economic Committee in its study of the economic well-being of the nation.

The views expressed there by both sides were in no way different from those which they have long been voicing. The only matter on which the two views were even basically alike was a reduction in federal taxation. But, business favored a cut that would stimulate investment in productive facilities, while labor wanted stimulation of consumption by easing of the burden on taxpayers in the lower individual brackets. Labor backed legislative aid for depressed areas; business opposed it. The old argument over the relationship of wage-boosting and price-boosting to inflation was worked to a frazzle. So was that over whether unemployment should be paid or prevented—and how. The joint-discussion idea was directly smacked by the declaration for business that government should promote a balance between management and labor in collective bargaining negotiations by "curbing the monopolistic power of big unions."

The whole scheme of negotiations was given a disturbing set-down by the decision at about the same time by a US Court of Appeals, restricting a former labor leader, who had become manager for a manufacturers' association, from negotiating on the side of management with a unit of the labor organization with which he had been connected. The decision, which has some very confusing and apparently arbitrary aspects, reversed an order by the National Labor Relations Board and an earlier temporary order by the circuit court. Information on whether it will be appealed is not yet available.

It is expected by some observers that friendly conferring will not be promoted by developments in congress under the administrative pressure for an increase of 15 percent in the minimum wage level—organized labor is pushing for a 25-percent boost. There is a feeling that such an increase will be followed sooner or later by demands for similar increases at all other levels.

The longshoremen have already got a boost by way of increased pension funds. The Mayor of New York has been told by the local union of drug and hospital workers that voluntary hospitals should not be given any increase in city funds because such increases and those in hospitalization costs "have not been reflected in increases for hospital workers.' Public hearings on "sub-standard" wages will be started by the city council on Wednesday (February 17).

Some optimists have a bit of belief that congress may go slow on help for labor because of the trouble that the Navy's Bureau of Ships is having as a result of the tieup of shipyards work on three nuclear vessels by a strike over wages, work rules and job classifications. The Navy proposed that union workers be allowed to complete one of the jobs. The union leader "regretted" that it could not go along with the Navy's request. The Navy responded by warning the company and the union that, if the work was not resumed by this week, it would transfer the job to some other shipyard.

Not everything on the strike-avoiding horizon is black, however. An agreement has been reached between a number of railroad companies and one of the strike-threatening groups of employees (the engineers) to let a government arbitration board settle a wage dispute. But, that is only one of about a score of the groups; the firemen-enginemen group has broken off such negotiations.

For National Guidance

In keeping with one of the proposals in his last "State of the Union" message, President Eisenhower has named a Commission on National Goals "to identify the great issues of our generation . . . plot comprehensive national goals for five or ten years ahead . . . develop a broad outline of national objectives and programs for the next decade and longer." The commission has eleven members, leaders in all walks in life and culture—one of them is the president of E. I. duPont de Nemours & Co. It is headed by the president of the American Assembly, affiliated with Columbia University, and will have its headquarters there. The activities of the commission will be financed by private funds at about a million dollars a year—which should put it fully beyond the intervention of politics. It is the President's expectation that the commission will make its first report next year—but not before his term of office has expired.

The work that such an organization can do is of limitless potentiality. Its membership is such that one can confidently expect that it will measure up fully to the President's statement that "we need more than politically ordained national objectives if we are to challenge the best efforts of free men and women," and, that it will, as he has predicted, "update and supplement the monumental work of the Committee on Recent Social Trends," appointed by President Hoover in 1931.

It is good to believe that "national" with relation to goals is not in this instance going to mean nationalistic or nationalization along the lines of philosophies and policies—and panhandlings — recently having widespread popularity.

It is encouraging to believe that, by reason of its personnel, the commission will be concerned at least as much—most likely more—with goals in social science as with those in what has come to be regarded as the special "science" of the space age. The need for guides and goals having to do with the peoples of the earth is far more important in terms of their welfare than is that for slithering among the denizens of outer space.

It is not going to be easy for the goals commission to get acceptance of its recommendatoins by the administrative—or especially the legislative—members of the federal government. There will be as much gap—and gab—there as there is in connection with the missile goals now. The Vice-President told a California newspaper group about ten days ago that the Presidential election will be decided on the basis of which candidate is best able to handle "the overwhelming issue of national security." Assumably he was referring to security in the areas of the Department of Defense. It is to be hoped that the goals commission will be more concerned with national security in the areas of the Departments of Commerce and Health, Education & Welfare—and yes, Labor.

Because of the relationship of the goals commission with the American Assembly, it is reasonable to presume that one of its objectives will be the development of better acquaintance, respect and understanding — politically, commercially and socially—in the relations between the United States and the nations of Latin America. For the ultimate good of the free world, there is a very big need in that direction.

Washington Talks It Over

Food and Drug Lawyers Are Busy Studying a Wage-Hour Law Decision of the Supreme Court. Not That It Has Anything to Do With Them in a Direct Way—But . . .

By Ralph L. Cherry
Washington Editor

Sometimes it's the little things that pack the biggest wallop. Such may be the case in a decision, handed down recently by the Supreme Court of the United States, that has largely gone unnoticed in the rush of other important events of the past several weeks.

The decision had nothing to do directly with the chemical industry—the particular point at issue was the wage-hour law—but food and drug lawyers are reading it in the light of food and drug law enforcement and thus it has become of some importance to the industries that must comply with these laws.

The case involves a question of "restitution" and whether the courts have the right to require the return of funds unlawfully gained or withheld when the law in dispute is silent on this point.

It is important to industries under the food and drug laws by reason of the fact that in some quarters of the Food & Drug Administration there is a strong feeling that better respect for the food and drug laws could be maintained if the agency had a few favorable court decisions under its belt upholding its right to require sellers to return funds they may have obtained unlawfully.

At least one attempt to apply this principle of law enforcement (Parkinson case) was tried by FDA several years ago. It came to naught because the lower courts said the FDA law didn't provide for restitution of funds and the precedent FDA sought to rely upon involved a temporary emergency law no longer on the statute books.

In the light of the recent Supreme Court decision in the wage-hour case (Mitchell v Robert DeMario Jewelry, Inc.), some agency lawyers feel the government may have made a mistake in not carrying the Parkinson case on to the highest court. For the court appears to have laid down the rule that courts in equity cases have an implied power to order reimbursement that is to be denied only when a statute "in so many words, or by a necessary and inescapable inference, restricts the court's jurisdiction."

Quoting from a previous decision that "the great principles of equity, securing complete justice, should not be yielded to light inferences, or doubtful construction," the Supreme Court added: "When congress entrusts to an equity court the enforcement of prohibitions contained in a regulatory enactment, it must be taken to have acted cognizant of the historic power of equity to provide complete relief in the light of the statutory purposes."

CHEMICALS AND RELATED MATERIALS

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Current MARKET Quotations

Unless otherwise indicated, listings are first-hand quotations prevailing, according to information and belief, February 11 on large lots, f.o.b. New York, with the lowest in the left-hand column and the highest in the right-hand column. The listings do not represent bid and asked prices nor a range over the week. Differences between high and low may be accounted for by differences in quantity, quality, locality, or individual suppliers' views. An index to the weekly market reports is to be found on page 4.

A

Abies siberica oil, cns ..... lb. 2.45 - 3.00
Acacia (see Arabic gum).
Acenaphthene, below 92.5 C. m.p., dms., works lb. .40 - —
Above 92.5 C. m.p., bbls. dms., works lb. .41 - .50
Acetaldehyde, 99% dms., c.l., works. lb. .12 - —
dms., l.c.l., works ..... lb. .13½- —
tanks, works ..... lb. .10 - —
Acetaldol (see Aldol).
Acetanilide, tech., flaked, bbls., bgs., c.l., frt alld lb. .32½- —
bbls., bgs., ton lots, frt alld. lb. .33½- —
bbls., bgs., smaller lots, frt. alld lb. .36½- —
USP, bbls., 225-lb dms any quantity lb. .79 - —
100-lb. dms., any quantity lb. .81 - —
Acetic acid, coml. or redist., 28%, bbls 100 lbs. 4.80 - —
56%, bbls. ..... 100 lbs 8.25 - —
70%, bbls. ..... 100 lbs 9.95 - —
80%, bbls. ..... 100 lbs.10 45 - —
Acetic acid, glacial, syn., CP, dms., dlvd 100 lbs.22.00 -23.00
tech., dms., c.l., dlvd. .. 100 lbs.13.75 - —
dms., l.c.l., dlvd. ..... 100 lbs.15.25 - —
tanks, dlvd ..... 100 lbs.10.00 — —
USP, cbys., dlvd ..... 100 lbs.31.00 -32.00
Acetic anhydride, aluminum ret. dms., c.l., dlvd. E lb. .16½- —
aluminum ret. dms., l.c.l., dlvd E. lb. .18 - —
tanks, dlvd. E. ..... lb. .14 - —
Acetoacetanilide, fib. dms., c.l., dlvd lb. .80 - —
fib dms., l.c.l., dlvd. lb. .81 - —
Acetoacet-o-chloroanilide, fib. dms., c.l., dlvd lb 1.35 - —
fib. dms., l.c.l., dlvd. ..... lb 1.36 - —
Acetoacet-o-toluidide fib dms., c.l., dlvd lb. .82 - —
fib dms., l.c.l. dlvd. lb. .83 - —
Acetone, CP, dms., c.l., dlvd. lb. .11 - —
dms., l.c.l., dlvd ..... lb. .12½- —
tanks, dlvd. ..... lb. .08½- —
Acetonitrile, dms., c.l., works .. lb. .43 - —
dms., l.c.l., works ..... lb. .45¾- —
tanks, works lb. .43 - —
Acetophenetidin, USP, 200-lb. dm., 1,000 lbs., frt alld lb. 1.22 - —
100-lb dm., 1,000 lbs., frt. alld. lb. 1.24 - —
Acetophenone, cns., dms. ..... lb. .42 - 1.30
Tech., dms., c.l., works ..... lb. .37 - —
dms., l.c.l., works ..... lb. .37¾- —
tanks, works ..... lb. .35 - —
N-Acetyl-p-aminophenol, 5,000-lb. lots, frt. adjusted lb. 1.30 - 1.45
smaller lots, dms., same basis lb. 1.35 - 1.55
Acetylene black, imp., bgs., c.l., duty and freight extra lb. .19 - —
cs., l.c.l., ex whse. ..... lb. .24½- .30
Acetylene tetrabromide, 16-dm. lots or more, f.o.b. works lb. .53 - —
Acetylsalicylic acid, USP, special, makers, primary distr., bbls., 1,000-lb. lots, point of shipt lb. .63½- —
USP, standard, fine, cryst. gran., (20-40 mesh) powd., (80 mesh), 250-lb. bbls., c.l., t.l., same basis lb. .55¼- —
Freight equald, shipt identical quantity over standard routes, from N. Y., Phila., Midland, Mich., Chicago and St. Louis.
Acetyltributyl citrate, tech., non-ret. dms., c.l., frt. alld. E. of Denver lb. .35½- —
non-ret. dms., l.c.l., frt alld. E. of Denver lb. .36½- —
tanks, frt. alld. E. of Denver. lb. .33 - —
tech., non-ret. dms., c.l., frt. alld. E. of Denver lb. .39½- —
non-ret. dms., l.c.l., frt alld. E. of Denver lb. .40½- —
tanks, frt. alld. E. of Denver lb. .37 - —

ACIDS

Acid quotations are listed individually. For example, prices on Acid, cresylic, may be found in the C's under Cresylic acid.

Aconite root, bls. ..... lb. .50 - .55
Acrolein, tech., dms., c.l., works lb. .51 - —
dms., l.c.l., works ..... lb. .51¾- —
tanks, works ..... lb. .46 - —
Acrylamide, dms., t.l., f.o.b. works. lb. .58 - —
dms., l.t.l., same basis ..... lb. .60 - —
Acrylic acid, glacial, dms., c.l., t.l., frt. alld lb. .57 - —
dms., l.c.l., l.t.l., frt. alld ... lb. .58 - —
Acrylonitrile, dms., c.l., t.l., frt. equald lb. .26 - —
dms., l.c.l., l.t.l., frt. alld ..... lb. .27 - —
tanks, frt. equald ..... lb. .23 - —

Adeps lanae (see lanolin).
Adipic acid, bgs., c.l., dlvd. ..... lb. .32¼- —
bgs. l.c.l. dlvd. ..... lb. .35 - —
Agar, USP Kobe No. 1, strip, bls. lb. 2.25 - 2.35
powd., 30 mesh., fib. dms lb. 2.40 - —
dl-Alanine, dms., 100-lbs. or more, f.o.b. works lb. 5.25 - —
dms., 1-99 lbs., same basis .. lb.10.00 - —
Aldol, 95%, dms., l.c.l., works lb. .28 - —
Aldrin, tech., fib. dms., c.l., t.l., dlvd lb. .99 - —
fib. dms., l.c.l., dlvd ..... lb. 1.04 - —

ALCOHOLS

Alcohol quotations are listed individually. For example, prices on Alcohol, furfuryl, may be found in the F's under Furfuryl alcohol.

Aletris root, bgs ..... lb. 1.50 - 1.75
Algin (see Sodium alginate)
Alizarin (see 1,2-Dihydroxy anthraquinone).
Alkali blue dry, 250-lb. bbls., dlvd. E of Rockies lb 2.38 - —
Alkali blue, toner, litho flushed, 125-lb. bbls. same basis. lb. 1.35 - —
Alkali blue prices 1c. higher W. of Rockies.
Allethrin, 90% dms., frt. alld lb.28.80 -28.90
Soln., 20% dms., 200-2,000 lb. lots, frt. alld lb 6.50 6.55
2½% dms. frt. alld. ..... lb. .95 - 1.10
Allspice oil (see Pimento oil).
Allyl alcohol, dms., c.l. dlvd. ... lb. .32½- —
dms., l.c.l., dlvd ..... lb. .34 - —
tanks, dlvd. ..... lb. .30 - —
Allyl bromide 55-lb. cbys. 5,005 lbs. or more works lb. 1.47 - —
55 lb. cbys., 1,045 to 4,950 lbs., works lb. 1.52 - —
55-lb cbys., 55 to 990 lbs. works. lb. 1.57 - —
Allyl chloride, dms., c.l. dlvd. lb. .17½- —
dms., l.c.l., dlvd ..... lb. .19 - —
tanks, dlvd. ..... lb. .15 - —
Allyl isocyanate (see Mustard Oil, syn.).
Almond oil, artif., bitter (see Benzaldehyde).
Almond oil, nat., bitter, f.p.a., bots. lb 2.75 3.45
NF, bots. ..... lb 3.00 3.30
sweet, USP, cns., dms. ..... lb. .70 - 1.30

Abbreviations

Used in OPD Market Quotations

alld.	allowed	distr.	distributor	No.	number
amorph	amorphous	djns.	demijohns	nom.	nominal
AMP	American melting point	dlvd.	delivered	o-	ortho
anhyd.	anhydrous	dms.	drums	ord.	ordinary
AOAC	Association of Official Agricultural Chemists	dom.	domestic	oz.	ounce
		E.	east	p-	para
a.p.a.	available phosphoric acid	e.p.	end point	Pac.	Pacific
approx.	approximately	equald.	equalized	pf.	proof
artif.	artificial	exp.	expressed	phos.	phosphate
ASTM	American Society for Testing Materials	Ext.	external	photo.	photographic
		F.	fahrenheit	pkgs.	packages
Atl.	Atlantic	ferment.	fermentation	powd.	powdered
Be.	Baume	f.f.a.	free fatty acid	precip.	precipitated
bbls.	barrels	f.f.c.	free from chlorine	prod.	producer
bgs.	bags	fib.	fiber	pt.	point
bls.	bales	f.o.b.	free on board	pulv.	pulverized
bots.	bottles	f.p.a.	free of prussic acid	purif.	purified
b.p.	boiling point	frt.	freight	redist.	redistilled
b.p.l.	bone phosphate of lime	gal.	gallon	refd.	refined
b.r.	boiling range	gran.	granular	refy.	refinery
bxs.	boxes	grd.	ground	reg.	regular
C	centigrade	i.&a.	iron and aluminum	resub.	resublimed
cbys.	carboys	i.b.p.	initial boiling point	ret.	returnable
CD	completely denatured	imp.	imported	SD	specially denatured
c.i.f.	cost, insurance, freight	incl.	included	s.d.	single distilled
cks.	casks	indust.	industrial	S.E.	southeast
c.l.	carlots	kgs.	kegs	sec.	secondary
cns.	cans	l-	laevo	secs.	seconds
coml.	commercial	lacq.	lacquer	s.g.	specific gravity
conc.	concentrated	lb.	pound	shipt.	shipment
CP	chemically pure	l.c.l.	less than carlots	soln.	solution
cps.	centipoises	l.t.l.	less truckload	s.u.	standard unit
cryst.	crystalline	liq.	liquid	syn.	synthetic
cs.	cases	mfrs.	manufacturers	tanks.	railroad tankcars
ctns.	cartons	m-	meta	tech.	technical
cyls.	cylinders	m.a.p.	mixed aniline point	tert-	tertiary
d-	dextro	min.	minimum	t.l.	truck loads
dbl.	double	m.p.	melting point	t.w.	tank wagons
denat.	denatured	N-	nitrogen	USP	U. S. Pharmacopoeia
dest-dist	destructively—distilled	n-	normal	vis.	viscosity
dl-	dextrolaevo	nat.	natural	VM&P	varnish makers & painters
dist.	distilled	neut.	neutral	W.	west
		NF	National Formulary	whse.	warehouse
		NNR	New and Nonofficial Remedies	w.w.	water-white

A unit-ton is 2,000 pounds of 1 percent of the basic constituent or other standard of the material. The percentage figure of the basic constituent multiplied by the price figure shown gives the price of 2,000 pounds of the material.

Aloe, Cape, cs. ..... lb. .30 - .35
powd., cs. ..... lb. .60 - .65
Curacao, kgs. ..... lb. .60 - .70
powd. kgs. ..... lb. .60 - —
Aloin, USP bbls., dms., kgs. ... lb. 3.25 - 3.75
Alphanaphthol (see a-Naphthol).
Alphanaphthylamine (see a-Naphthylamine).
Alphanitronaphthalene (see a-Nitronaphthalene)
Alphapicoline (see a-Picoline).
Alphaterpineol (see a-Terpineol).
Alphatocopherol (see a-Tocopherol).
Alum, ammonium, gran., bgs., works 100 lbs. 4.30 - —
lump, dms., works ..... 100 lbs. 5.05 - —
powd., dms., works ..... 100 lbs. 5.20 - —
USP, burnt, dms. ..... lb. .20 - .21
hydrous, dms. ..... lb. .07¾- .08
Alum, potassium, gran, bgs. works. 100 lbs. 4.55 - —
lump, dms., works ..... 100 lbs. 5.30 - —
powd., dms., works ..... 100 lbs. 5.45 - —
USP, burnt., dms. ..... lb. .20 - .21
USP, hydrous, dms ..... lb. .07¾- .08
Alum, potash-chrome, dms. ..... lb. .17 - —
Alumina, calcined, bgs., c.l., works. lb. .05 - —
bgs., l.c.l., works ..... lb. .05¼- .06
Aluminum acetate, basic soln., 24%, bbls., l.c.l., works lb. .14 - —
Aluminum chloride, coml., anhyd., dms., c.l., works, frt. equald lb. .16 - —
dms., l.c.l., works ..... lb. .16½- —
cryst., dms., c.l. works 100 lbs.21.00 — —
dms., l.c.l., works 100 lbs.21.50 — —
Soln., 32° cybs., c.l., works... lb. .0495- —
cbys., l.c.l., works ... lb. .0570- .1095
tanks, works ....100 lbs. 3.95 - —
NF, gran., dms., works ..... lb. .31 - .32
Aluminum fluoride, tech., anhyd., bgs., c.l., works lb. .17¼ —
bgs., l.c.l., works ..... lb. .18¼- .20¼
bulk, c.l., basis 80% ..... lb. .14½- —
Aluminum fluoride in fib. dms. 0.35c per lb higher
Aluminum formate, basic soln., containers extra c.l., works. 100 lbs.11.00 - —
containers extra, l.c.l. works. 100 lbs.11.50 - —
Aluminum hydrate, heavy, bgs., c.l., frt. equald lb. .03½- —
bgs., 20,000-40,000 lb lots, same basis lb. .03¼- —
bgs., 2,000-20,000 lb. lots, same basis lb. .04¼- —
bulk, c.l., same basis lb. .03¼- —
Aluminum hydroxide, dried, USP XV, fib dms., works lb. .82½- —
fib dms., contract, works lb. .79¼- —
Aluminum hydroxide, gel, pharmaceutical, 14-15% Al_2O_3, fib. dms., works lb. .22 - —
9-9½% Al_2O_3, fib dms., works lb. .19 - —
fib dms., contract, works lb. .18 - —
Aluminum hydroxide, tech., powd. (See Aluminum hydrate).
Aluminum metal, 99%+ ingots, 10,000-lb. lots, frt. alld. lb. .2810- —
pigs, 10,000-lb. lots, frt. alld lb. .26 - —
Aluminum oxide, amorphous (See Alumina, calcined).
Aluminum paste, lining, extra-fine, dms. lb. .71 - —
Standard grade, dms ..... lb. .48½- —
Aluminum powder, lining, extra-fine, dms. lb. 1.13 - —
Standard grade, dms ..... lb. .83 - —
Aluminum paste and powder prices are f.o.b. shipping point. Add 1c per lb. for 100-lb. dm., 1½c per lb for 50-lb. dm., 3c. per lb. for 10 lb. can and 5c. to 12c. per lb. for smaller containers. Deduct 1c. per lb. for single shipment of 400 to 1,499 lbs., 2c for 1,500 to 4,999 lbs., 3c for 5,000 to 29,999 lbs. and 4c. for 30,000 lbs or more. Where destination is within the continental U. S., a deduction equivalent to the lowest available common carrier transportation rate will be made from seller's invoice on orders of 200 lbs. or over
Aluminum resinate, precip., 2.1% Al, dms lb. .40¼- —
Aluminum stearate, dibasic, ctns., c.l lb. .39 - —
ctns., l.c.l. ..... lb. .40 - .44
Monobasic, ctns., c.l. ..... lb. .39 - —
ctns., l.c.l. ..... lb. .40 - .44
Tribasic, ctns., c.l. ..... lb. .39 - —
ctns., l.c.l. ..... lb. .40 - .44
Aluminum sulfate, coml., grd., bgs. c.l., works, frt. equald ton.41.00 - —
bulk, c.l., same basis ....ton.40.00 - —
lump, bgs., c.l., same basis ton.44.00 - —
Iron-free, bgs., c.l., works, frt. equald 100 lbs. 3.80 - —
bgs., l.c.l., works, frt. equald. 100 lbs. 4.30 - 4.30
USP, gran., dms., works ..... lb. .20 - —
USP, powd., dms., works ..... lb. .27 - —
Aluminum sulfate prices $1 per ton higher in the South.
Aluminum trihydrate, heavy (see Aluminum hydrate, heavy).
Ambergris, gray, bots ..... oz. 6.50 -10.00
p-Aminoacetanilide, tech., paste, dms., frt. alld lb. 1.57 - —
Aminoacetic acid, NF, bbls., frt. adjusted lb. 1.50 - 1.75
Aminoazotoluene base, bbls., 100% basis lb. 1.03 - 1.18
p-Aminobenzoic acid, tech., dry, dms., works lb. 1.72 - —
2-Amino-4-chlorophenol, tech., solid, dms., frt. alld lb. 8.10 - —
p-Aminodiphenylamine, tech., solid, dms., frt. alld lb. 3.00 - —
Aminoethyl ethanolamine, dms., c.l., dlvd lb. .475 - —
dms., l.c.l., dlvd ..... lb. .49 - —
tanks, dlvd. ..... lb. .45 - —
2-Amino-2-methyl-1-propanol, dms., c.l., frt. alld. lb. .44 - —
dms., l.c.l., frt. alld. ..... lb. .45 - —
tanks, frt. alld. ..... lb. .42 - —
m-Aminophenol, dist., dms., ton lots. lb. 2.05 - —
dms., smaller lots. ..... lb. 2.50 - —
p-Aminophenol, dms., frt. alld. lb. 1.15 - —
Aminophylline, USP, 100-lb. dm., frt. alld lb. 3.25 - —
p-Aminosalicylic acid, dms., 100 lbs. or more, frt. adjusted lb. 3.40 - —
Ammonia, anhyd., fertilizer, tanks, works, frt. equald, E. of Rockies ton.88.00 - —
refrigeration, tanks, works, frt. equald, E. of Rockies ton.90.50 - —
Aqueous, 29.4%, tanks, works, anhyd. basis, E. of Rockies. ton.91.00 - —
Ammoniacal liquor (see Ammonia, aqueous).
Ammoniac, sal gray, bgs., c.l., works, frt. equald 100 lbs. 8.25 - —
bgs., l.c.l., same basis 100 lbs. 8.65 -12.05
Ammoniac, sal., white (see Ammonium chloride, tech.).
Ammonium acetate, purif., dms lb. .40 - —
Ammonium benzoate, USP, fib. dms. ton lots, works lb. 1.00 - —
fib dms. 1,000-lb lots, works. lb. 1.05 - —
Ammonium biborate, gran., dms., c.l., works ton.325.00 - —
dms., ton lots, ex whse. 100 lbs.20.40 - —
dms., smaller lots, ex whse. 100 lbs.21.15 - —
Ammonium bicarbonate, dom., dms., c.l., works 100 lbs. 7.00 - —
dms., l.c.l., works .....100 lbs. 9.00 - —
Ammonium bichromate, dms., works. lb 42 43
Ammonium bifluoride, dms., dlvd lb. .2145- .224

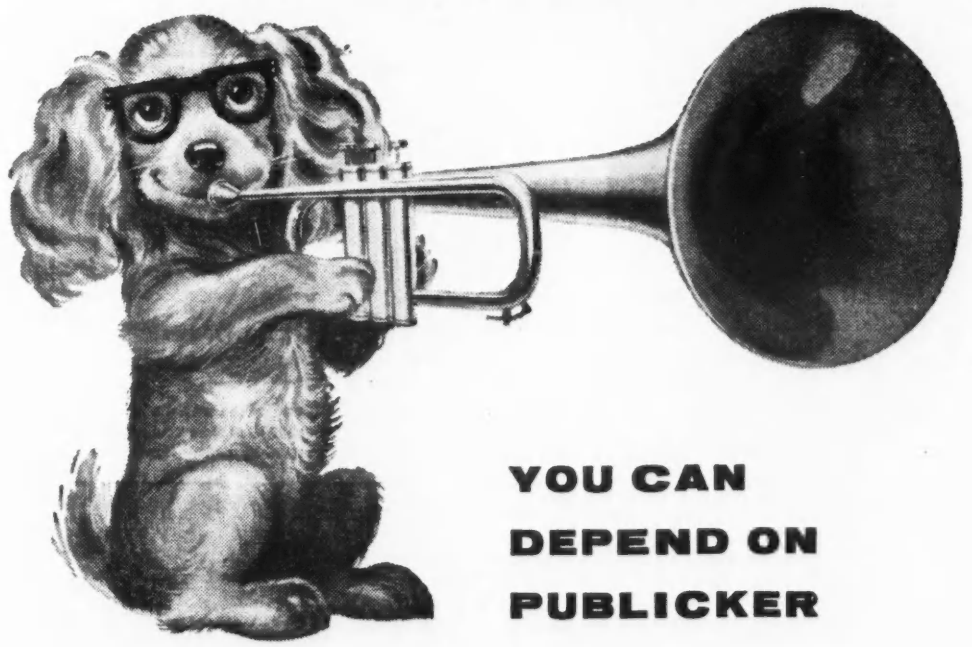
Ammonium bromide, NF, gran., dms., c.l., t.l., frt. equald ..lb. .44 - —
dms., l.c.l., same basis ..... lb. .46 - —
Ammonium carbonate, USP, lump, dms., c.l. ..lb. .15½- —
Ammonium chloride, white, tech., fine gran., bgs., c.l. works 100 lbs 5.75 - —
bgs., l.c.l., works .... 100 lbs 7.75 - 8.20
USP, gran. fib dms ..... lb. .17½- —
Ammonium citrate, dibasic, 250-lb. dm. f.o.b works lb. .77 - —
Ammonium dichromate (see Ammonium bichromate).
Ammonium fluoride (see Ammonium bifluoride).
Ammonium gluconate, tech., 200-lb. dm. f.o.b works E lb. .45 - —
Ammonium hydroxide (see Ammonia aqueous).
Ammonium iodide NF, 25-lb. far, f.o.b. works lb. 4.26 - —
Ammonium lauryl sulfate, dms., c.l., frt. alld lb. .20½- —
dms., l.t.l., frt. alld ..... lb. .21½- —
tanks, frt. alld ..... lb. .19½- —
Ammonium lignin sulfonate bgs., c.l., works 100 lbs 3.25 - —
bgs., l.c.l., works 100 lbs 3.40 - 3.65
Ammonium linoleate, 80%, dms., works lb. .50 - .55
Ammonium molybdate, CP, cryst fib dms. 15,000 lbs. works lb 1.22 - —
fib dms. 2,000-lb contracts, works lb 1.23 - —
single fib dms. works lb 1.24 - —
Ammonium nitrate dom fertilizer grade, 33.5% N, bags, f.o.b. works ton 63.00 - —
with dolomite, 20.5% N, bgs., c.l., Hopewell, Va ton 48.00 - —
Imp. Canadian 33.5% N, eastern, bgs., c.l., ship't point, frt equald to $3 ton base price ton 68.00 - —
Ammonium oxalate, tech., fine gran. 250-lb dm. f.o.b works E lb .28½- —
Tech., powd., 200-lb. dm., same basis lb. .28½- —
Ammonium pentaborate, gran., bgs. c.l. works ton 193 00 —
bgs., ton lots, ex whse 100 lbs. 14 23 - —
bgs., smaller lots, ex whse 100 lbs. 15.48 -17.48
Ammonium pentaborate powder $10 per ton higher in bags.
Ammonium persulfate, tech., dms., 10-ton lots or more, works. lb. .18 - —
dms., smaller lots, works lb .20 - .23
Ammonium phosphate, coml., bgs., c.l., works, frt. equald lb. .09¼- —
bgs. l.c.l. same basis lb. .10 - —
Dibasic, NF, V, bbls., dms lb. .46 - —
Dibasic, tech., bgs., c.l., works, frt. alld lb. .09¼- —
Ammonium silicofluoride, dms., works lb. .11¾- .13¼
Ammonium sulfamate bgs., c.l., t.l., works lb. .19 - —
bgs., l.c.l. works lb .20¼ .27
Ammonium sulfate standard granular bulk f.o.b works base price ton 32 00 - —
purif., bgs. f.o.b. works lb .08½- .15
Large granular bulk, c.l., works. ton 35 00 - —
bgs. c.l., works ton 40 00 - —
Tech., bulk c.l. t.l., works ton 52 00 - —
bgs. c.l., t.l., works ton 56 0 - —
bgs., l.c.l. l.t.l., works—100 lbs 3.20 - .20
Ammonium sulfide, liq., 40-44%, tanks frt., equald .100% basis ton 160.00 - —
Ammonium sulfocyanide tech (see Ammonium thiocyanate).
Ammonium thiocyanate, tech., cryst. dms., c.l., works lb. .20 - —
dms. l.c.l. works lb. .22 - .26
Tech., soln., 50%, tanks, frt. equald., basis ammonium thiocyanate content lb. .17¼- —
Ammonium thioglycolate, coml., 55-gal. dms., ton lots, 100% basis lb. 1.15 - —
d-Amphetamine hydrochloride, monobasic, dms lb. 17.50 -23.50
dl-Amphetamine hydrochloride, dibasic, dms lb. 4.50 - 6.00
d-Amphetamine phosphate, fib. dms., 100-lb lots lb. 15.00 - —
dl-Amphetamine phosphate, dms. lb. 4.20 - 5.60
d-Amphetamine sulfate, fib. dms., lb. 15.00 -17.00
dl-Amphetamine sulfate, fib. dms., lb. 4.20 - 5.60
Amyl acetate, ex fusel oil, tech., dist., from 125° to 150°C., dms., c.l., frt alld E of Rockies lb. .18½- .19
dms., l.c.l. same basis lb. .20 - .20½
tanks same basis lb. .16 - .16½
Ex pentane, reg., dms., c.l., dlvd. lb. .19 - —
dms., l.c.l., dlvd ..... lb. .21½- —
tanks, dlvd. ..... lb. .16½- —
tech., dms., c.l., dlvd ..... lb. .17 - —
dms., l.c.l., dlvd ..... lb. .18½- —
tanks, dlvd. ..... lb. .14½- —
Syn., oxo process, dms., c.l., dlvd. lb. .19 - —
dms., l.c.l., dlvd ..... lb. .20½- —
tanks, dlvd ..... lb. .16½- —
Amyl alcohol, ex fusel oil (see Fusel oil refd.).
Amyl alcohol, ferment, refd., 128°-132°C., dms., l.c.l., dlvd lb. .43½- —
refd., ACS grade, dms., l.c.l., dlvd lb. .45½- —
ex pentane, mixed, amyls, dms., c.l., frt. alld lb. .19 - —
dms., l.c.l., frt. alld ..... lb. .20½- —
tanks, frt. alld ..... lb. .16½- —
primary, dms., c.l., frt. alld. lb. .19¾- .20¼
dms., l.c.l., frt. alld .... lb. .21¼- .21¾
tanks, frt. alld ..... lb. .17¼- .17¾
sec-synthetic, dms., c.l., works, frt. alld lb. .19 - —
dms., l.c.l., works ..... lb. .20½- —
tanks, works. ..... lb. .17 - —
tert-synthetic, dms., c.l., frt. alld. E lb. .17 - —
dms., l.c.l., frt. alld. E .. lb. .18½- —
tanks, frt. alld E ..... lb. .14½- —
Amyl alcohol, l-pentanol syn. normal, dms., c.l., works lb. .41½- —
dms., l.c.l., works ..... lb. .43 - —
tanks, works ..... lb. .39¼- —
2-pentanol, dms., c.l., works lb. .65 - —
dms., l.c.l., works ..... lb. .70 - —
tanks, works ..... lb. .60 - —
Amyl n-butyrate, dms. ..... lb 1.00 - 1.25
Amyl cinnamic aldehyde, dms. lb. 1.70 - 2.20
p-tert Amyl phenol, dms., c.l., works. lb. .26¾ - —
dms., l.c.l., works ..... lb. .27¾- —
Amyl salicylate, cns., dms..... lb. .73 - 1.08
Amyris oil, dms. ..... lb. 1.65 - 2.05
Anethole, tech., dms. ..... lb. .92 - 1.00
USP, cns., dms. ..... lb. 1.12 - —
Angelica root, bls. ..... lb .90 - 1.00
Angelica root oil, bots ..... lb 120 00 -140.00
Angelica seed oil, bots. ..... lb 120 00 -130.00
Aniline, dms., c.l., frt. alld..... lb. .20 - —
dms., l.c.l. frt. alld. ..... lb. .21 - —
tanks, frt. alld. ..... lb. .18 - —

Aniline oil (see Aniline).
Aniline salt, dms., c.l., truckloads, 20,000 lbs. min., frt. alld. lb. .33 - —
dms., l.c.l., same basis..... lb. .35 - —
Anise oil, USP, dms. ..... lb. 1.75 - 3 00
Anise seed, Mexican, bgs..... lb. .16 - —
Spanish, bgs. ..... lb. .16½- —
Anisic aldehyde, dms..... lb. 1.50 - 2.20
o-Anisidine, dms., c.l., frt, alld lb. .80 - —
dms., l.c.l., same basis..... lb. .82 - —
tanks, same basis ..... lb. .78 - —
p-Anisidine, dms., works..... lb. .97 - —
Anthracene, 90-95%, dms., c.l., t.l., f.o.b., works lb. .42½- —
dms., l.c.l., minimum shipment 1,000 lbs., same basis lb. .45 - —
Anthranilic acid, 99%, 150-lb. dms., dlvd lb. 1.15 - —
Anthraquinone, 99.5% bbls., c.l., frt. alld lb. .83 - —
bbls., l.c.l., same basis ..... lb. .86 - —
Electrical grade, bbls., l.c.l., same basis lb. 1.10 - —
Antimony butter (see Antimony trichloride).
Antimony metal, bulk, c.l., mines. lb. .29 - —
es., c.l., mines..... lb. .29¼- —
Antimony oxide, bgs., c.l., frt. alld. lb. .24½- —
bgs., l.c.l., frt. alld. ..... lb. .26 - —
Prices of antimony oxide are 2% higher west of the Rockies.
Antimony sulfide, approx. 65%, bgs., 10,000-lb. lots, dlvd ... lb. .23 - —
bgs., smaller lots, dlvd .... lb. .24 - .26
Antimony trichloride, anhyd., solid, pails, c.l., works lb. .41 - —
pails, t.c.l., works ..... lb. .43 - —

Antimony-potassium tartrate, tech., powd., 250-lb. dm., f.o.b. works, E lb. .69¼- —
USP, powd., 250-lb. dm., same basis.. lb. .74¼- —
Apomorphine hydrochloride, USP, bots., 25-oz. lots..oz. 35.60 - —
Apricot kernel oil, USP, dms....lb. .70 - 1.25
Arabic gum, amber sorts, 10 bgs. lb. .24 - —
USP, powd., bbls. ..... lb. .29 - .30
Areca nuts, powd., bbls. ..... lb. .13 - —
Arecoline hydrobromide, NF, bots., tins, 100 oz. or more..oz. 4.00 - —
l-Arginine, free base, dms., 10-kilo lots or more kilo. 90.00 - —
l-Arginine glutamate, dms., 10-kilo lots or more kilo. 60.00 - —
l-Arginine monohydrochloride, dms., 10-kilo lots or more..kilo. 60.00 - —
Arnica flowers (true Montana), bls. lb. .75 - —
Aromatic petroleum solvents—See Solvent Naphtha, petroleum, aromatic
Arsenic, crude (95%), bulk, c.l., works lb. .016 - —
bbls., c.l., works ..... lb. .031 - —
Arsenic trioxide, NF, powd., dms., 300-lbs., f.o.b. works..lb. .48 - —
Arsenic, white, powd., bbls., c.l., works lb. .04½- —
bbls. t.c.l., works ..... lb. .06½- .07½
Arsenous acid, tech. (see Arsenic, white).
Arsenous acid USP (see Arsenic trioxide).
Arylid maroons, deep shades, bbls. lb. 3.70 - —
Light shades, bbls. ..... lb 2.85 - —

Asafetida gum, cns ..... lb. .36 - .40
Powd., bbls., dms ..... lb .75 - .80
Asbestine (see Talc fibrous, New York).
Asbestos, Canadian crude
6D, c.l. (30 tons) mines ton 86 00 - —
7D, c.l. (30 tons) mines ton 75 00 - —
7F, c.l. (30 tons) mines ton 71 00 - —
7H, c.l. (30 tons) mines ton 61 00 - —
7K, c.l. (30 tons) mines ton 50.00 - —
7M, c.l. (30 tons) mines ton 44 00 - —
7R, c.l. (30 tons) mines ton 43.00 - —
7RF, c.l. (30 tons) mines ton 44 00 - —
7T, c.l. (30 tons) mines ton 41 00 - —
7TF c.l. (30 tons) mines ton 44.00 - —
Asbestos prices are in Canadian funds; l.c.l. lots $4 per ton higher.
Ascorbic acid, USP 25, 50-kilo dms., kilo. 10.00 - —
10 kilo dms. ..... kilo. 10.35 - —
5-kilo dms. ..... kilo. 10.75 - —
1-kilo bottle ..... kilo. 11 00 - —
500-gram bottle..... kilo. 11.50 - —
Ash black (see Barium sulfide).
Asphalt, gilsonite, black jet, bgs., c.l., mines ton. 40.00 - —
ex-whse, N. Y. N. J ton. 86 50 - —
seconds, 300°-390°F. fusing pt., bgs., c.l., mines ton. 35.00 - —
select, 350°F. fusing pt., bgs., c.l., mines ton. 41.00 - —
270°-295°F. fusing pt., bgs., c.l., mines ton. 40.00 - —
Manjak No. 10 crude, dms., works. lb. .07 - —

you're doggone tootin'



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★ *Isoamyl Alcohol* ★ *Acetone* ★ *Acetaldehrde*
★ *Acetid Acid* ★ *Amyl Acetate* ★ *Refined Fusel Oil* ★ *N-Butyl Chloride*

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Asphalt—Bois de Rose Oil

Asphalt, petroleum, cut-back, tanks, tankwagon, refy. gal. .09½- —
emulsion tanks tankwagon, refy. gal. .09½- —
steam-refd., 50-80 penetration, tanks, tankwagon, refy. ton 21.00 - —
85-300 penetration tanks, tankwagon, refy ton 20.00 - —
Aspirin (see Acetylsalicylic Acid).
Atropine, NF, tins oz. 5.75 - 7.50
Atropine sulfate, USP, bots oz. 5.25 - 5.75
Azelaic acid, bgs., c.l., dlvd lb. .40 - —
bgs., ton lots, same basis lb. .41 - —

B

Bacitracin, bulk, 1,000,000,000 or more units 50,000 units. .65 - —
less than 1,000,000,000 units. 50,000 units. .70 - —
Balm of Gilead buds dried bgs lb 1.25 - 1.35
Barberry root bark, bgs lb. 1.00 - 1.10
Barbital, NF, 100-lb. dms., f.o.b. works lb. 4.50 - —
Barbital sodium, NF, 100-lb. dms., works lb. .23 - —
Barium carbonate, precip., bgs., c.l., works ton 111.50 - —
bgs. smaller lots, works ton 126.50 - —
Barium chlorate, dms., works lb .32 - .41
Barium chloride, anhyd., bgs., c.l., works ton 176.00 - —
bgs. t.e.l. works ton 196.00 - —
NF, cryst., dms., 400-lbs., works. lb. .23 - —
Barium chloride, tech., cryst., bgs., c.l., works 100 lbs. 7.00 - —
bgs., l.c.l., works 100 lbs. 8.00 - —
Barium chromate, bgs. frt. equald. lb. .38 - —
Barium dioxide (see Barium peroxide).
Barium hydrate, cryst., bgs., c.l., t.l., frt. equald ton 208.00 - —
bgs. l.c.l., l.t.l., frt equald ton 218.00 - —
Barium monohydrate, 99%, bgs., c.l., frt. equald 100 lbs. 11.25 - —
bgs., l.c.l., frt. equald 100 lbs. 11.75 - —
Barium monoxide (see Barium oxide).
Barium nitrate, bbls., c.l., t.l., dlvd. lb. .16 - —
bbls. l.c.l., l.t.l., dlvd. lb. .17 - —
Barium oxide, grd., dms., c.l., t.l., frt. equald ton 275.00 - —
dms., l.c.l., l.t.l., frt. equald. ton 285.00 - —
Barium peroxide, dms., frt. equald. lb. .20 - —
Barium stearate, ctns., c.l. frt alld. lb. .41 - —
ctns., l.c.l., same basis lb. .42 - .46
Barium sulfate, tech. (see Barytes and blanc fixe).
Barium sulfate, X-ray, 100-lb. dm. lb. .19½- —
Barium sulfide, dms., c.l., works. ton 100.00 - —
dms., l.c.l., works ton 110.00 - —
Barytes, southern, off-color, bgs., mines ton 25.00 - —
95-75%, bgs., mines ton 25.00 - —
white, water-grd., paper bgs., c.l., St. Louis ton 55.00 -55.25
paper bgs., ex whse., New York ton 79.85 - —
Battery acid, cbys. c.l. works, E. 100 lbs. 2.35 - —
cbys., l.c.l., works, E. 100 lbs. 2.65 -10.95
Bauxite, bulk, mines ton. 7.00 -10.00
Bay oil, NF, Puerto Rican, 50-55%, cns. lb. 1.95 - 2.70
55-60%, cns. lb. 2.50 - 3.05
NF, West Indian, 50-55%, cns., dms. lb. 2.35 - —
Bayberry wax, bgs. lb. .45 - .50
Beeswax, crude, African, bgs lb. .53 - .55
Brazilian, bgs. lb. .57 - —
Central American, bgs. lb. Nom.
Chilean, bgs. lb. .58 Nom.
Refd., USP bleached white, bricks, 100-lb. ctns lb. .69 - .71
white, slabs, 100-lb. ctns. lb. .68 - .70
yellow, bricks, 100-lb. ctns. lb. .59 - .61
yellow, slabs, 100-lb. ctns. lb. .58 - .60
Belladonna leaf, bls. lb. .26 - —
Belladonna root, bls. lb. .28 - —
Bentonite, dom. 200 mesh, bgs., c.l., mines ton 14.00 - —
Imp. Italian, white, high gel., bgs., 5-ton lots, ex whse ton 95.20 - —
bgs., 1-ton lots, ex whse ton 99.00 - —
Imp., Italian, white, low gel., bgs., 5-ton lots, ex whse ton 93.40 - —
bgs., 1-ton lots, ex whse ton 97.16 - —
Benzal chloride, cbys., works lb. .44 - —
Benzaldehyde, NF, dms. lb. .80 - 1.05
Tech., dms., c.l., t.l. lb. .47 - —
dms., l.c.l. lb. .48 - —
Benzene, coaltar, pure or nitration, tanks, works:
Bethlehem, Pa. gal. .34 - —
Birmingham district gal. .34 - —
Chicago district gal. .34 - —
Cleveland district gal. .34 - —
Geneva, Utah gal. .34 - —
Johnstown, Pa. gal. .34 - —
Benzene, coaltar, pure or nitration, tanks, works:
Lackawanna, N. Y. gal. .34 - —
Lone Star, Tex. gal. .34 - —
Lorain, Ohio gal. .34 - —
Middletown, Ohio gal. .34 - —
Mennequa, Colo. gal. .34 - —
Philadelphia district gal. .34 - —
Pittsburgh district gal. .34 - —
Sparrows Point, Md. gal. .34 - —
Syracuse, N. Y. gal. .34 - —
Terre Haute, Ind. gal. .34 - —
Youngstown, Ohio gal. .34 - —
Benzene, petroleum, nitration or industrial, Houston, Tex., tanks, gal. .34 - .40
Benzene hexachloride, 25% and 99% gamma isomer (see Lindane).
Benzene hexachloride, tech., high gamma, bgs., c.l., t.l., consignment, dlvd., gamma-unit. .0075- —
bgs., c.l., t.l., direct sale, f.o.b. works gamma-unit. .0065- —
tech., low gamma, bgs., c.l., t.l., consignment, dlvd gamma-unit. .0075- —
bgs., c.l., t.l., direct sale, f.o.b. works gamma-unit. .0056- —
Benzidine hydrochloride, bbls., c.l., frt. alld., 100% basis lb. 1.19 - —
bbls., l.c.l., same basis lb. 1.21 - —
Benzidine sulfate, tech., bbls., frt. alld., 100% basis lb. 1.21 - —
Benzidine yellow, AAA, bbls. dlvd. lb. 2.20 - —
AAOT, bbls., dlvd. lb. 2.55 - —
Lightfast, bbls., dlvd. lb 3.40 - —
Benzocaine, dms., 100-lbs., frt. alld. lb. 3.25 - —
Benzoic acid, tech., bbls., dms., c.l., t.l., frt., alld lb. .37 - —
bbls., dms., ton lots, same basis lb. .41 - —
bbls., dms., 1,000-lb. lots, same basis lb. .43 - —
USP, bbls., dms., ton lots lb. .48 - —
bbls., dms., 1,000-lb. lots lb. .50 - —

BENZOL

Benzol quotations, both coaltar and petroleum, may be found under Benzene.

Benzoin gum, Sumatra cs. lb. .33 - —
Benzophenone, dms. lb. 1.40 - 1.65
Benzotriazole, tech., dms., 1,000-lb. lots, works lb 2.25 - —
Benzotrichloride, cbys., 1,000-lb. lots or more, frt., equald lb. .21 - —
cbys. smaller lots, frt., equald lb. .23 - —
Benzoyl chloride, cbys., dms., c.l., works, frt., equald lb. .22 - —
cbys., l.c.l., same basis lb. .23 - —
tanktrucks, dlvd Metropolitan area lb. .21 - —
Benzoyl peroxide, purif., fib cms., 50 to 1,000-lb. lots, works lb. .98 - 1.08
Benzyl acetate, f.f.c., cns. cms lb .58 - .79
Benzyl alcohol, NF, dms. lb. .58 - .80
Tech., dms., dlvd lb. 47½- .65
Benzyl benzoate, NF, USP, 40-lb. dms lb. .68 - —
Benzyl chloride, tech., cbys., dms., c.l., works, frt., equald lb. .22½- .25¼
cbys., dms., l.c.l., same basis lb .23½- 25¼
tanktrucks, dlvd., Metropolitan area lb. .21 - —
A 2½c. differential is quoted on benzyl chloride in 5-gal cbys. In steel dms. prices are ½c. lower
Benzyl cinnamate, cns. lb. 3.30 - 3.60
Benzyl dimethylamine, dms., works. lb 2.25 - —
Benzyl formate cns lb 1.85 2.10
Benzyl isoeugenol, cns lb 9.25 - —
Benzyl propionate bots. lb 1.35 - 1.65
Benzyl salicylate, bots. lb. 1.50 - 1.85
Benzylidine acetone bots. lb 1.75 1.80
Benzylidine chloride (see Benzal chloride).
Berberine bisulfate, cns. lb.56.50 - —
Berberine hydrochloride, bots lb.56.50 - —
Bergamot oil nat. NF Italian cns. lb.11.00 -12.00
Betagammapicoline (see b,g-Picoline).
Betahydroxynaphthoic acid (see b-Oxynaphthoic acid)
Betaoxynaphthoic acid (see b-Oxynaphthoic acid)
Betamethylnaphthalene (see b-Methylnaphthalene)
Betanaphthol (see b-Naphthol)
Betanaphthylamine (see b-Naphthylamine)
Betaphenylethylamine (see b-Phenylethylamine).
BHC (see Benzene hexachloride, tech.)
Biotin, cryst., bots. gram 10.00 - —
Biphenyl (see Diphenyl).
Birchtar oil crude, cns. lb 1.50 1.90
Rectified, cns. lb 1.75 2.00
Bismuth chloride, jars lb 5.11 - —
Bismuth hydroxide, dms. lb 4.60 4.65
Bismuth metal, bxs., ton lots lb 2.25 - —
Bismuth nitrate cryst. dms. lb 2.08 2.17
Bismuth oxide, anhyd., 100-lb. dm., f.o.b works lb 4.42 - —
Bismuth oxychloride 25-lb dm., f.o.b works lb 4.42 - —
Bismuth subcarbonate USP dms. lb 3.20 - —
Bismuth subgallate, NF, 200-lb. dm., f.o.b. works lb 3.15 - —
Bismuth subiodide, fib. dms lb. 5.37 - —
Bismuth subnitrate NF, 200-lb. dm., f.o.b works lb. 2.65 - —
Bismuth subsalicylate, USP, 100-lb. dm., f.o.b. works lb. 3.50 - —
Bismuth-ammonium citrate, USP, powd. jars lb 4.22 - —
Bisphenol-A, bgs., c.l., t.l., single shipt., 70,000-lbs. or more, frt alld lb. .29¼- —
bgs., c.l., t.l., less than 70,000 lbs., same basis lb. .30 - —
bgs. l.c.l. same basis lb .31 - —
Blackberry root bark bls lb .50 .55

BLACK PIGMENTS

Black pigment quotations are listed individually. For example, prices on Black, acetylene, may be found in the A's under Acetylene black.

Blanc fixe, direct process, bgs. c.l., works ton 145.00 - —
bgs., l.c.l., works ton 155.00 - —
bgs., l.c.l. New York whse ton 195.00 - —
Blood, dried, 16-16½% ammonia, bgs., New York unit-ton. 5.00 - —
high-grade, unground, 16-17% ammonia, bgs., Chicago unit-ton. 5.00 - —
Bloodroot, bls. lb. .90 - 1.00

BLUE PIGMENTS

Blue pigment quotations are listed individually. For example, prices on Blue, ultramarine, may be found in the U's under Ultramarine blue.

Blue dyes (see Dyes)
Blue vitriol (see Copper sulfate)
Bois de rose oil, Brazilian, dms. lb. 2.20 - 2.85
Peruvian, dms. lb. 1.95 - 2.40

IN NORDA'S MUSEUM ROOM, one of the world's largest amethystine crystals, weighing nearly 300 kilos, from South Africa. A rare specimen you're invited to see when visiting Norda.
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BON acid maroons, pure, bbls lb 1.75 - —
Resinated bbls lb. 1.50 - —
Bone black, dms., l.c.l., frt. alld. lb. .19½- .26¼
Pacific coast bone black prices 2c. per lb. higher.
Bonemeal, steamed, works, E ton.75.00 - —
Bone phosphate, defluorinated of lime (see Defluorinated phosphate).
Bone phosphate, precip. (see Calcium phosphate, tribasic).
Borax, tech., anhyd, 99½%, bgs., c.l., works ton.92.00 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs. 7.42 - —
bgs., smaller lots, same basis 100 lbs 8.67 -10.67
bulk, c.l., works ton.83.00 - —
gran., decahydrate, 99½%, bgs., c.l., works ton.50.00 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs 5.32 - —
bgs., smaller lots same basis, 100 lbs. 6.57 - 8.57
bulk, c.l., works ton.43.50 - —
gran., pentahydrate, 99½%, bgs., c.l., works ton.64.50 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs. 6.05 - —
bgs., smaller lots, same basis 100 lbs. 7.30 - 9.30
bulk, c.l., works ton.58.00 - —
USP, powd., bgs., c.l., works, ton.54.00 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs 6.45 - —
bgs., smaller lots, same basis, 100 lbs. 7.70 - 9.70
Bordeaux powder tribasic bgs., c.l., dlvd lb .24 - —
bgs. l.c.l., same basis lb. .26 - —
Boric acid, tech, anhyd 99.9% bgs., c.l. works ton.335.00 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs.19.62 - —
bgs. smaller lots same basis, 100 lbs.20.87 -22.87
cryst., 99.9%, bgs., c.l., works, ton.163.50 - —
bgs. ton lots ex whse, New York or Chicago 100 lbs.11.05 - —
bgs., smaller lots, same basis, 100 lbs.12.30 -14.30
dms., c.l. works ton 188.50 - —
dms., ton lots, ex whse., New York or Chicago, 100 lbs.12.30 - —
bgs., smaller lots, same basis 100 lbs.13.05 - —
gran. 99.9% bgs. c.l. works, ton.112.00 - —
bgs. ton lots, ex whse, New York or Chicago 100 lbs 8.47 - —
bgs. smaller lots same basis, ton.174.25 - —
dms., c.l. works ton.137.00 - —
dms., ton lots, ex whse, New York or Chicago 100lbs.9.72 - —
dms., smaller lots same basis, 100 lbs.10.47 - —
bulk, c.l. works ton.106.00 - —
powd., bgs., ton tots ex whse, New York or Chicago, 100 lbs. 8.85 - —
bgs. smaller lots, same basis, 100 lbs.10.10 -12.10
dms., smaller lots, same basis 100 lbs.11.45 - —
USP boric acid $25 per ton higher in bags.
Borneol, cns lb. 2.75 - —
Boron trichloride CP, 1,800-lb. cyls., works lb 1.25 - —
100-lb cyls works lb. 1.70 - —
Boron trifluoride gas, cyls, t.l., works lb. .70 - —
cyls., l.t.l., works lb. .70 - —
Brimstone (see Sulfur).
Broenner's acid, bbls. lb. 1.53 - —
Bromine purif. cs. c.l., t.l., dlvd. E of Rockies lb. .32 - —
cs., l.c.l., same basis lb. .34 - .39
ret. dms., c.l., t.l., dlvd. E. of Rockies lb. .31 - —
ret. dms., l.c.l., same basis lb. .31 - .34
tanks, same basis lb. .21½- —
Bromochloromethane dms., c.l., frt. equald lb. .48 - —
dms., l.c.l., same basis lb. .50 - —
tanks, same basis lb. .47 - —
Bromoform, pharmaceutical grade, 100-lb. cbys lb. 1.80 - 1.90
Bromstyrol, bots. lb. 5.35 - 5.70
Brucine, cns. oz. 1.75 Nom.
Brucine sulfate, NF, cns. oz. 1.75 - 1.90
Buchu leaves, bls lb. .80 - .85

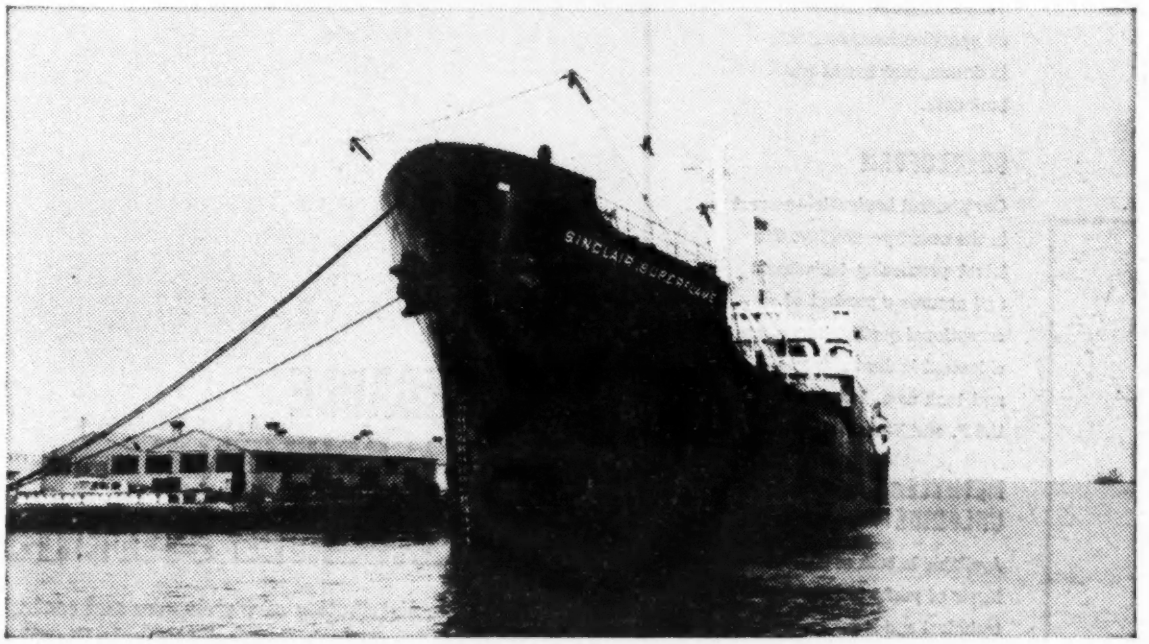
BROWN PIGMENTS
Brown pigment quotations are listed individually. For example, prices on Brown, iron oxide, may be found in the I's under Iron oxide brown.

Butadiene, refd cyls., c.l., refy lb .21 - —
cyls., l.c.l. refy lb. .22 - —
tanks, dlvd. lb. .14½- —
Butane-1, tanks, works lb. .0625- —
Butane-2, tanks, works lb. .0570- —
n-Butyl acetate, ferment, dms., c.l., frt. alld lb. .17 - —
dms., l.c.l., same basis lb. .18½- —
tanks, same basis lb. .14½- —
Syn., dms., c.l., dlvd. E lb. .17 - —
dms., l.c.l., same basis lb. .18½- —
tanks, same basis lb. .14½- —
sec-Butyl acetate, syn., dms., c.l., dlvd.E lb. .14¾- —
dms., l.c.l., same basis lb. .16¼- —
tanks, same basis lb. .12¼- —
n-Butyl acrylate, dms., c.l. or t.l., straight or mixed frt. alld E. lb. .42½- —
dms., l.t.l., same basis lb. .43½- —
tanks, same basis lb .40 —
Prices of n-butyl acrylate are 1c. per lb. higher in Ariz., Calif., Idaho, Nev., Ore., Utah and Wash.
n-Butyl alcohol, ferment, dms., c.l., frt. alld lb. .18 - —
dms., l.c.l., frt. alld lb. .19½- —
tanks, frt. alld lb. .15½- —
n-Butyl alcohol, syn., dms., c.l., dlvd lb. .18 - —
dms., l.c.l., frt. alld lb. .19½- —
tanks, dlvd lb. .15½- —
Sec-synthetic, dms., c.l., dlvd lb. .15 - —
dms., c.l. dlvd lb. .16½- —
tanks, dlvd lb. .12½- —
Tert-synthetic, dms., c.l., frt. alld, dlvd. E lb. .15 - —
dms, l.c.l same basis lb. .16½- —
tanks, same basis lb. .12½- —
Butyl aldehyde (see Butyraldehyde).
Butyl chloride dms, c.l., works lb. .37½- —
dms., l.c.l. works lb. .38¼- —
n-Butyl ether dms, c.l. works lb. .35¼- —
dms., l.c.l., works lb. .36 - —
tanks, works lb. .33¼- —
Butyl lactate, dms., c.l., frt. alld, E. of Rockies lb. .42½- —
dms, l.c.l. same basis lb. .43½- —
tanks, same basis lb. .40 - —
Butyl laurate, dms., works lb. .37½- —
Butyl methacrylate, dms., c.l., t.l., works lb. .53 - —
dms., l.c.l., works lb. .55½- —
Butyl oleate, refd., dms., l.c.l., works lb. .32 - —
Butyl phenylacetate, dms. lb. 4.50 4.60
Butyl phthalate (see Dibutyl phthalate).
Butyl stearate, dms., c.l., frt. alld, E. of Mississippi lb. .27¼- —
dms., l.c.l., same basis lb. .28¼- —
Butylamine (see Mono-, Di- and Tributylamine).
tert-Butylamine, dms., c.l., t.l., f.o.b. works lb. .47 - —
dms., l.c.l., same basis lb. .47½- —
tc., t.t., same basis lb. .45 - —
Butylated hydroxyanisole, food grade, dms., dlvd lb. 4.75 - —
6-tert-Butyl-m-cresol (see Mono-tert-butyl-m-cresol).
Butylated hydroxytoluene (see 2,6-Di-tert-butyl-p-cresol).
1,3-Butylene glycol, dms., c.l., t.l., dlvd lb. .20½- —
dms., l.c.l., l.t.l., f.o.b. works lb. .22 - —
tanks, dlvd. lb. .18 - —
p-tert-Butylphenol, bgs., c.l., dlvd. lb. .27½- —
bgs., l.c.l., works lb .28½- —
Butyraldehyde, dms., c.l., dlvd lb .22 —
dms., l.c.l., dvld. lb. .23½- —
tanks, dlvd lb. .19½- —
Butyric acid, 99%, dms., c.l., frt. equald lb. .34 —
dms., l.c.l., same basis lb. .34½- —
tanks, same basis lb. .32½- —
Butyric ether (see Ethyl butyrate).
Butyrolactone, dms., c.l., t.l., works, lb. .40 - —
dms., l.c.l., same basis lb. .43 - —

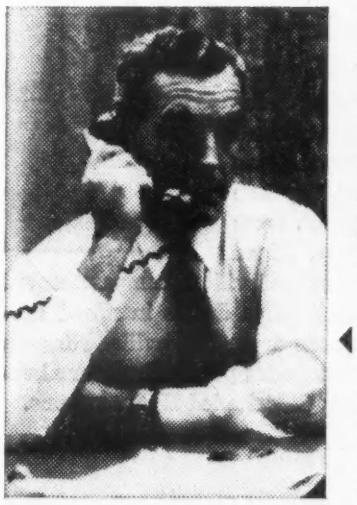
C

Cacao butter (see Cocoa butter).
Cadmium CP red, dark shade, bbls., frt alld. E. of Rockies lb. 5.45 - —
Light shade, bbls same basis lb. 4.55 - —
medium shade, bbls., same basis, lb. 5.20 - —
Medium light shade bbls, same basis lb. 4.80 - —
Orange-red shade, bbls., same basis lb. 4.20 - —
Yellow all shades, bbls, frt alld E. of Rockies lb. 2.75 - —
Cadmium iodide 25-lb fib dms lb 6.75 7.00
Cadmium metal ingots or sticks, ton lots, cs., dlvd lb. 1.30 - —
Cadmium-mercury lithopone orange, deep shade, bbls, frt alld E of Rockies lb. 1.61 - —
Cadmium mercury lithopone red, dark shade, bbls., same basis lb. 1.91 - —
Red, light shade bbls same basis lb. 1.68 - —
Red, medium shade bbls same basis lb. 1.83 - —
Red, medium light shade, bbls., same basis lb. 1.76 - —
Red, maroon shade bbls same basis lb. 1.99 - —
Cadmium selenide lithopone maroon, bbls., frt alld E of Rockies lb. 2.72 - —
Maroon, dark shade bbls, same basis lb. 2.74 - —
Orange, bbls., same basis lb. 1.54 - —
Cadmium selenide lithopone red, orange-red shade bbls same basis lb. 1.68 - —
Red, dark shade bbls, same basis lb. 2.52 - —
Red light shade bbls, same basis lb. 1.84 - —
Red, medium-light shade bbls, same basis lb. 1.96 - —
Red, medium shade bbls, same basis lb. 2.19 - —
Cadmium selenide, lithopone yellow all shades bbls frt alld E. of Rockies lb. 1.15 - —
Caffeine NF citrated ums, 100 lb lots or more lb 2.70 - —
USP nat., cryst., anhyd., dms., 100-lb lots or more lb 2.10 - —
cryst. hydrous dms., 100 lb lots or more lb. 1.96 - —
USP, syn., anhyd., dms., 100-lb. lots or more lb 2.10 - —
cryst., hydrous, dms., 100-lb lots or more lb 1.96 —
Cajuput oil, native cns lb 1.75 2.55
Redist USP cns lb 1.5- 2.10
Calamine USP dms. lb 34 —
Calamus oil, bots lb 12.00 -20.00
Calciferol cryst. 10-kilo or more lots, works gram .54 - —
1-10 kilo lots gram .55 - —
Calciferol in edible oil (see Viosterol).
Calcium p-aminosalicylate trihydrate fib dms., 100 lbs. or more, frt. adjusted lb 3.10 - —

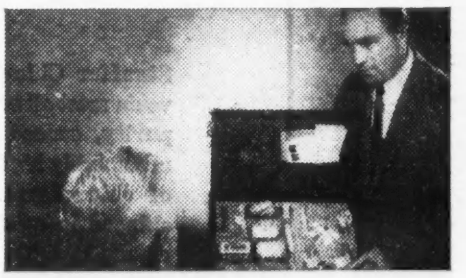
HOW HERCULES HELPS...



MOOR A TANKER—When the S.S. Sinclair Superflame was lashed by a hurricane while mooring, every line snapped during the storm's fury except one—an American Manufacturing Company's "Floterope," made from Hercules Pro-fax® polypropylene. Today, over a year later, that same polypropylene line is still in use aboard the Superflame—proof that Pro-fax rope can meet the marine industry's most demanding challenge. Whether it be for rope or automobile seat covers, household appliances or industrial uses, wherever a tough, rigid, versatile synthetic is needed, Pro-fax is setting new standards for accomplishment.



LAUNDER A SHIRT—Nothing makes a man feel better-dressed than a well-laundered shirt. That's why so many commercial laundries depend on Huron Starch to provide a truly professional job. In the field, Hercules-trained representatives back up the performance of the product by assisting laundries in finding solutions for technical problems.



IMPROVE INDUSTRIAL BLASTING
"The Man with The Red Valise," a familiar sight to those who use industrial explosives, is typical of Hercules service. In this kit is the complete line of Hercules blasting caps in dummy form. Using this display, the Hercules representative can familiarize the customer with the complete range of Hercules blasting devices that are available to fit various requirements.

HERCULES POWDER COMPANY
INCORPORATED
900 Market Street, Wilmington 99, Delaware

CHEMICAL MATERIALS FOR INDUSTRY

060-2

HERCULES

Calcium Arsenate—Cascara Sagrada Bark

Calcium arsenate dealers bgs., c.l., frt alld lb. .09 - .09¼
bgs. l.c.l. same basis lb. .10 - .10½
Calcium bromide NF, jars, 100 lbs. or more lb. .97 - —
Calcium carbide, standard generator size, 600-lb dms. c.l. dlvd ton.149.00 - —
Calcium carbonate, nat., dry-grd., air floated, 325 mesh, bgs., c.l., works ton.10.50 —
chalk whiting 325 mesh, bgs. c.l. works ton.32.00 34.00
water-grd., ½ to 10 microns, bgs., c.l., works ton.30.00 - —
10 to 20 microns, bgs., c.l., works ton.17.00 -18.00
Precip., dense, bgs., c.l., works. ton.30.00 -35.00
bgs., l.c.l., works ton.45.00 -50.00
medium, bgs. c.l., works ton.38.00 - —
bgs., l.c.l., works ton.48.00 - —
surface treated, bgs., c.l., works. ton.40.00 -42.00
bgs., l.c.l., works ton.55.00 -57.00
ultrafine, bgs., c.l., works ton.117.50 167.50
bgs., l.c.l., works ton.137.50 187.50
Calcium chloride, flake, 77-80%, paper bgs. c.l., works, frt. equald ton.31.00 - —
Conc., flake or pellet, 94-97%, paper bgs., c.l., works, frt. equald ton.37.80 - —
Calcium chloride, liquor, 40%, tanks, frt. equald. ton.12.50 - —
Powd., 77% min., paper bgs., c.l., works, frt. equald ton.37.00 - —
Purif., gran., dms lb. .27 - —
Solid., 73-75%, dms., c.l., frt. equald ton.29.50 - —
dms., l.c.l., works, frt. equald ton.36.00 -73.00
USP, gran., dms. lb. .32 - —
Calcium chromate, bgs., dlvd lb. .37 - —
Calcium cyanide dms., c.l., dlvd E. of Rockies lb. .20 - —
dms., l.c.l., same basis lb. .24 - .55
Calcium cyclamate 100-lb dms lb. 1.95 - —
Calcium gluconate, USP, AA grade, 150-lb. dm., ton lb. .73½- —
USP, powd., 150-lb. dm, ton lb. .66½- —
Calcium hydride, lump, dms. works. lb. 2.20 3.00
Calcium hypochlorite, high test, gran., 45-lb. cs., dlvd. E. of Rockies cs.23.85 -25.60
100-lb. dms., same basis dm.33.30 -36.55
Calcium hypophosphite dms., 1,000-lb lots lb. 1.28 - —
Calcium iodide, jars lb. 4.52 - —
Calcium lactate, NF, dms., f.o.b. works lb. .43 - .46
Calcium mandelate, USP, 150-lb. dm., works lb. 3.25 - —
Calcium naphthenate, liq., 4% Ca., dms., frt. equald lb. .30 - —
Calcium pantothenate, USP, jars, 1 kilo or more kilo.35.00 - —
Calcium para-aminosalicylate (see Calcium p-aminosalicylate).
Calcium phenolsulfonate, dms lb. 1.24 - 1.25
Calcium phosphate, dibasic, USP, bgs., c.l., frt equald 100 lbs.16.00 - —
Dibasic, feed grade, 18½% P, bgs., c.l., t.l., frt. equald ton.86.00 - —
bgs. c.l., t.l. f.o.b. Texas City works ton.80.50 - —
bgs., l.c.l., frt. equald ton.96.00 - —
21% P., bgs., c.l., t.l., frt. equald ton.97.65 - —
bgs., l.c.l., frt. equald ton.107.65 - —
Prices of calcium phosphate dibasic in bulk $3 per ton less than bg., c.l. prices
Calcium phosphate, monobasic, bgs., 10,000-lb. lots, frt. equald, 100 lbs. 7.45 - —
bgs., smaller lots, same basis, 100 lbs. 7.95 - —
Tribasic NF, precip., bgs., c.l., works, frt. equald 100 lbs. 9.25 - —
bgs., l.c.l., frt. equald, 100 lbs.10.00 - —
Calcium phytate bgs., 50 lbs. or more, f.o.b. warehouse N. Y. lb. .39 - —
Calcium resinate precip. dms ton lots, frt. alld., works lb. .40¼- —
Calcium silicate hydrated, bgs., c.l., works lb. .06 - —
bgs., l.c.l., works lb. .06½- —
Calcium silicate, paint grade (see Wollastonite).
Calcium stearate, ctns. c.l. lb. .39 - —
ctns., l.c.l. lb. .40 - .44

Calcium sulfate (see Gypsum)
Calomel, NF, mild, powd., dms., 100-lbs., f.o.b. works lb. 5.42 - —
NF, mild, precip., dms., 100-lbs., f.o.b. works lb. 5.67 - —
Camphene 46° m.p. dms incl., c.l., works lb. .15 - —
dms. incl., l.c.l., same basis lb. .16½- —
tanks, same basis lb. .12½- —
Camphene, chlorinated 67-69% (see Toxaphene)
Camphor, monobromated, NF, dms., kgs lb. 3.63 - 3.70
Nat., USP, powd., cs., 100-lb. lots. lb. .60 - .65
tablets, 1-oz. cs. lb. .85 - .90
USP, gran., bbls., 2,000-lb. lots. lb. .59 - —
Syn., USP gran., powd., bbls., 1,000-lb lots lb. .60 - —
bbls. smaller lots lb. .61 - —
tablets, ctns., 1,000-lb. lots. lb. .85 - —
ctns 500-lb lots lb. .86 - —
ctns smaller lots lb. .87 - —
Syn., tech., 1 bbl. or more lb. .48 - —
Camphor oil, sassafrassy dms. lb. .35 - .55
White, dms. lb .26 .50
Cananga oil, native cns. lb 6.50 7.00
Rectified, cns. lb. 7.25 -10.00
Candelilla wax, crude, bgs. lb. No offers
Refd., pure, bgs. lb. .67 - .68
Powdered Candelilla wax 20 to 100 mesh, 8c higher
Cantharides, Chinese, cs. lb. 1.00 - —
powd., bgs. lb. 1.15 - —
Russian, bgs. lb. 2.00 - 2.15
powd., bgs. lb. 2.15 - 2.30
Caprie acid, dms lb. .35½- .38
tanks lb. .33 - .34¼
Caprolactum monomer, bgs., c.l., t.l., f.o.b. works lb. .52 - —
bgs., l.c.l., t.l.l., same basis lb. .57 - —
tanks, same basis lb. .49 - —
Capryl alcohol, 85% dms., c.l., and t.l., works lb. .19 - —
dms., t.t.l. same basis lb. .19½- —
tanks, frt. equald lb. .16½- —
Sec. 92-99%, dms., c.l., f.o.b. works. lb. .22 - —
dms., l.c.l., f.o.b. works lb. .23 - —
tanks, f.o.b. works lb. .19½- —
Caprylic acid, dms lb. .35½- .38
tanks lb. .33 - —
Capsicum (see Pepper red)
Capsicum oil (see Capsicum oleoresin).
Capsicum oleoresin, NF, from dom pepper, dms lb. 4.00 - —
NF, from African pepper, dms. lb. 4.50 — —
Caraway oil, NF, dms. lb. 3.15 - 3.40
Caraway seed, Danish, bgs. lb. .16 - —
Dutch, bgs. lb. .17½- —
Polish, bgs. lb. .17¼- —
Carbazole, 97%, bbls., ton lots, works lb 1.05 - —
Carbon black, channel, rubber beads, bulk, c.l., works lb. .08 - —
bgs., c.l., works lb. .08½- —
bgs., l.c.l., works lb. .16¼- —
Furnace, fast extruding, bgs., c.l., works lb. .06¾- —
ctns., l.c.l., whse lb. .13½- —
high abrasion, bulk, c.l., works. lb. .07¼- —
bgs., c.l. works lb. .07¾- —
bgs., l.c.l., dlvd. or whse lb. .14½- —
high modulus, bgs., c.l., works. lb .06¼- —
ctns., l.c.l., whse. lb. .13 - —
semi-reinforcing, bgs., c.l., works. lb. .05¾- —
bgs., ctns., l.c.l., whse. lb. .12½- —
Carbon black, pigment, high color beads, ctns., c.l., works lb. .72 - —
ctns., l.c.l., dlvd. or whse lb. .79 - —
medium color, uncompressed. bgs., c.l., works lb. .14 - —
bgs., l.c.l., dlvd. or whse lb. .22½- —
Carbon dioxide, indust. wholesale, bulk, 30,000-2,999,999 lbs., dlvd. Metropolitan areas, E. ton.60.00 -115.00
bulk, 3,000,000 lbs. of more, dlvd., Metropolitan areas, E ton.55.00 - —
Solid, bulk, wholesale, works ton.85.00 - —
Carbon disulfide, 55-gal. dms., c.l., works, frt. equald to competitive points lb. .071 - —
55-gal. dms., l.c.l., same basis lb. .086 - .091
5-gal. dms. 30 dms to c.l., same basis lb. .131 - —
5-gal. dms., less than 30 dms., same basis lb. .161 - —
tanks, dlvd. lb. .0545- —
Carbon tetrachloride, CP, consumers, dms., c.l., frt. alld lb. .12¾- —
dms., l.c.l., frt. alld lb. .15¼- —
Tech., consumers, dms., c.l., t.l., frt. alld lb. .11¾- —
dms., l.c.l., t.t.l., frt. alld lb. .14¼- —
tanks, frt. alld lb. .10¾- .11¼
Carboxymethyl cellulose (see CMC).
Carbromal, NF, dms., 100-lb. lots, works lb 4.00 - 4.25
dms smaller lots, works lb 4.10 - 4.75
Cardamom oil, NF, bots. lb.39.00 -42.00
Cardamom seed, bleached "A" lb. 3.20 - —
Bleached "B" lb. 3.10 - —
Decorticated Alleppey, cs. lb. 2.30 - —
Guatemala, cs. lb. 3.15 - —
Green, Alleppey, bgs. lb. 2.35 - —
Ceylon, bgs. lb. 2.15 - —
Carmine No. 40, NF, bulk, 100-lb lots or more, dlvd. lb.16.80 - —
bulk, smaller lots, dlvd. lb.16.90 -17.30
Carnauba wax, chalky, bgs., ton lots lb. .70 Nom.
North country, No. 2, crude, bgs., ton lots lb. .80 - .81
refd., pure, ton lots lb. .90 - .92
North country, No. 3, Ceara, ton lots lb. .71 - .73
Ceara, refd., pure, bgs., ton lots lb. .83 - .84
North country, No. 3, Parnahyba, ton lots lb. .73 - .75
Parnahyba, refd., pure, bgs., lots lb. .83 - .84
Yellow, No. 1, Ceara, bgs., ton lots lb. 1.05 - 1.07
Parnahyba, bgs., ton lots lb. 1.08 - 1.10
Powdered carnauba wax, 20 to 100 mesh, 8c higher.
Carotene, tech., 1,350,000 A units per gram, tins 5-10 kilo lots, dlvd gram. .20½- —
in carrot oil, 5,000,000 to 8,000,000 A units per lb., dms., works million units. .12 - —
USP, microcrystalline in oil, 400,000 A units per gram, dms., dlvd million units. .144 - —
b-Carotene in vegetable oil, semi-solid suspension, 400,000 A units per gram, cns kilo.57.60 - —
Liquid in vegetable oil, 500,000 A units per gram cns kilo.72.00 - —
Pure, cryst., 1,600,000 to 1,670,000 A units per gram., cns. kilo.240.00 - —
Carvol, bots. lb. 5.00 5.40
Cascara sagrada bark, bulk lb. .34 - .36

CARBON TETRACHLORIDE

Technical grade meets all specifications. Available in drums, tank trucks and tank cars.

CHLOROFORM

Our plant at Louisville—newest in the country—employs the latest processing techniques and assures a product of exceptional quality. Immediate shipment in drums, trucks and tank cars. Two grades: U.S.P. and Technical.

METHYLENE CHLORIDE

Available in bulk at highest levels of purity for every technical and industrial use.

PERCHLORETHYLENE

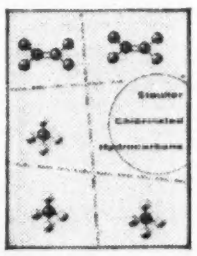
Technical grade for industrial degreasing and Dry-cleaning grade, both stabilized for use in all standard machines. Drums, tank trucks and tank cars from many points throughout the country.

TRICHLORETHYLENE

For industrial degreasing and chemical intermediate use. Available in drums from Louisville and stock points throughout the country; in drums, tank cars and tank trucks from Niagara Falls.

DEPENDABLE SINGLE SOURCE OF 5 CHLORINATED SOLVENTS

The wide distribution of warehouses and central location of manufacturing facilities make Stauffer a dependable, continuous and *flexible* source of Chlorinated Solvents. Plants at Louisville and Niagara Falls... warehouses and distributor points throughout the country are convenient sources for Stauffer Chlorinated Solvents wherever you are located.



Stauffer Chlorinated Solvents meet all standards for purity, exceed many, and are notably high in the case of chloroform. They are shipped in quantities from drums to tank cars. Mixed loads available from Louisville in compartmented cars and trucks. 55-gallon drums in mixed carloads and truckloads from Louisville, Niagara Falls and many distributor points. Send for a brochure on Stauffer's Chlorinated Hydrocarbons.

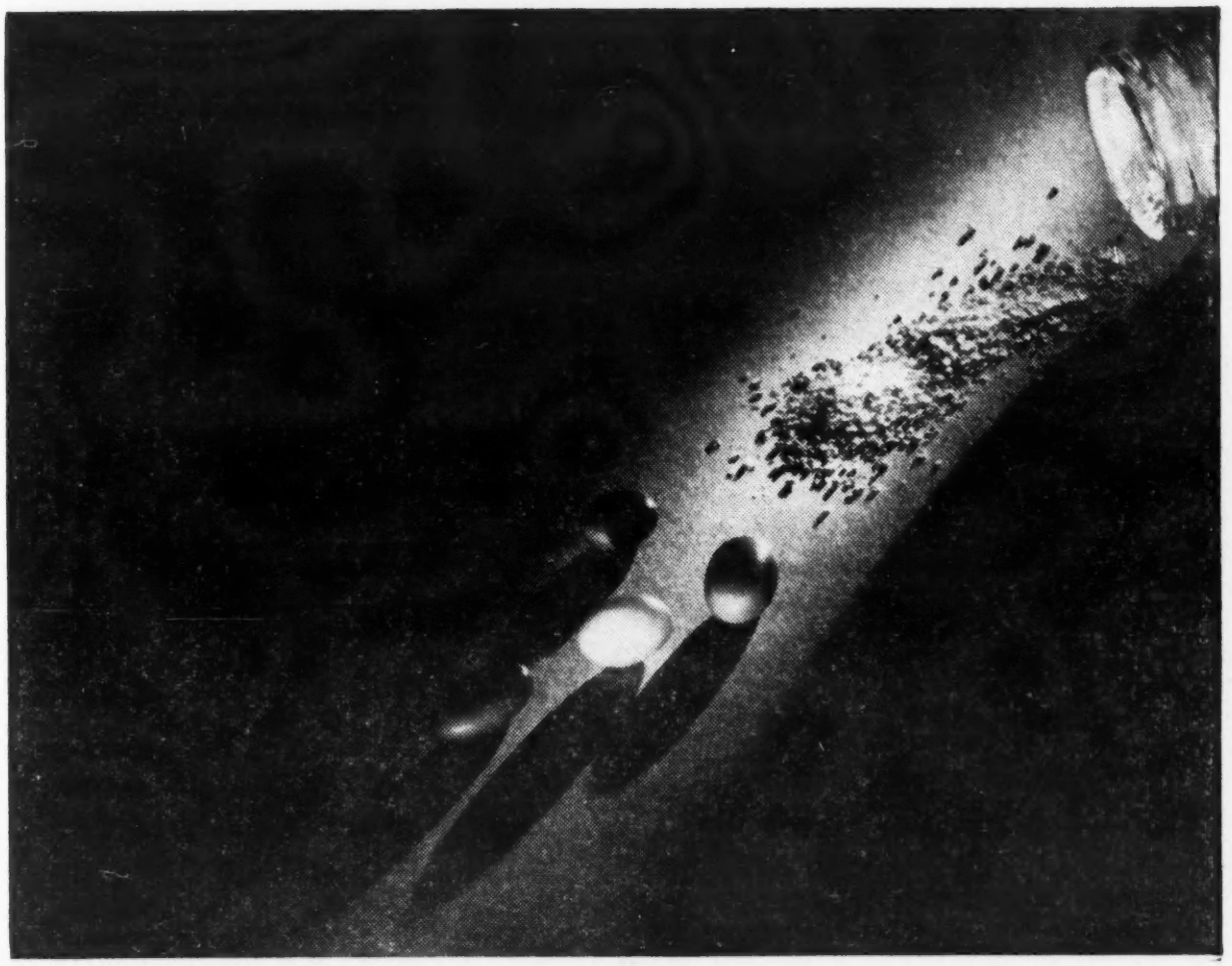
Stauffer CHEMICALS SINCE 1885

75 YEARS OF SERVICE TO INDUSTRY AND AGRICULTURE 1885 1960

STAUFFER CHEMICAL COMPANY

380 Madison Avenue, New York 17, N.Y.
Prudential Plaza, Chicago 1, Illinois
824 Wilshire Boulevard, Los Angeles 17, California
636 California Street, San Francisco 8, California

Casein, dom., edible, acid precip., 30 mesh., bgs., 10,000-lb. lots or more, works	lb.	.56	—
edible, acid, precip., 80 mesh, bgs., 10,000-lb lots or more, works	lb.	.64	—
imp., inedible, acid-precip., grd., Argentine, bgs., c.l., ex-dock, Eastern seaports	lb.	.19	.19¼
New Zealand, bgs., c.l., same basis	lb.	.25	—
Cashewnut shell, liquid, treated, dms., c.l., Newark, N. J.	lb.	.22	—
dms. ton lots, same basis	lb.	.23	—
dms., dm lots, same basis	lb.	.25	—
Cassella acid, dms. frt. alld., 100% basis	lb	1.44	1.75
Cassia, Padang, "A," bls	lb.	.30	—
"B," bls.	lb	.29	—
"C," bls	lb.	.28	—
Korintje "A," bls	lb.	.34	—
"B," bls.	lb.	.30	—
"C," bls.	lb.	.30	—
Cassia oil (see Cinnamon leaf oil, USP).			
Castor oil dom. blown dms. c.l.	lb	.2550	—
dms., l.c.l.	lb	.2650	—
dehydrated, bodied, dms. c.l.	lb.	.2700	—
dms., l.c.l.	lb.	.2850	—
tanks	lb.	.2500	—
dehydrated, unbodied, dms., c.l	lb	.2500	—
dms., l.c.l.	lb	.2660	—
tanks	lb.	.2360	—
hydrogenated, bgs., c.l.	lb.	.2450	—
bgs., ton lots	lb	.2850	—
bgs., l.c.l. dlvd	lb	.3050	—
No. 1, dms., c.l.	lb	.2150	—
dms., l.c.l.	lb	.2250	—
tanks	lb.	.17¾	—
No. 3, tech., dms., c.l.	lb	.2125	—
dms. l.c.l	lb	.2225	—
tanks	lb	.1925	—
refd., deod., dms., c.l.	lb.	.2650	—
dms., l.c.l.	lb.	.2750	—
USP, dms., c.l.	lb.	.2350	—
dms., l.c.l	lb	.2450	—
tanks	lb	.2150	—
Imported, No. 1, Braz., tanks	lb.	.17¾	.18
Sulfonated, 50%, dms., works	lb.	.15	.15¼
75%, dms., works	lb.	.19	.19½
Castor oil acids, dehydrated, dms.	lb	44¼	.45¼
Split, dms	lb	37¼	.38¼
Castor pomace, bgs. c.l., works	ton	35.00	—
Castoreum, nat, cns.	lb	5.25	—
Syn, cns.	lb	9.00	—
Catechol, CP, cryst., fib., dms., works	lb.	2.17½	—
Resub. dms. works	lb	4.29½	—
Catnip leaves, Southern, bls	lb.	Nom.	
Caustic potash (see Potash caustic).			
Caustic soda (see Soda, caustic).			
Cedarleaf oil USP XIII cns. dms.	lb.	2.50	3.10
Cedarwood oil, cns., dms.	lb.	.62	.70
Celery seed, French, bgs	lb	.33	—
Indian, bgs.	lb.	.19	—
Cellulose acetate, flake, powd., bgs. ctns., 100-lb lots or more, dlvd. E	lb.	.35	.45
Cellulose acetate butyrate, powd., 17% butyryl content, bgs., dlvd. E	lb.	.545	.555
27% butyryl content, bgs. dlvd. E	lb.	.595	.605
38% butyryl content, bgs., dlvd. E	lb.	.545	.555
38% butyryl content halt-second, bgs., dlvd E	lb.	.545	.555
50% butyryl content bgs. dlvd., E	lb.	.585	.595
Cellulose gum, methyl (see Methyl Cellulose)			
Cellulose gum, pure high vis. bgs., 23,000 lb lots or more works, frt alld	lb.	.57	—
bgs., smaller lots, same basis	lb.	.59	—
Cerium chloride (see Rare Earth Chloride).			
Cerium chloride 46% dms. dlvd	lb.	.25	—
Cerium hydrate 74% CeO fib dms., 100-lb lots or more	lb	1.40	—
77% CeO, fib dms 100-lb lots or more	lb	1.74	—
Cerium oxalate (see Rare earth oxalate).			
Cerium oxide, optical grade, bgs., 50-lb lots or more dlvd	lb	1.85	1.90
bgs., smaller lots, dlvd	lb.	2.15	—
Cetyl alcohol NF fib cns. c.l., t.l., dlvd. E	lb.	.41½	—
fib cns., l.c.l., same basis	lb.	.43½	—
tanks, same basis	lb.	.39	—
Extra, cns., c.l., t.l., dlvd. E	lb.	.48½	—
fib cns., l.c.l., same basis	lb.	.50½	—
tanks, same basis	lb.	.46	—
Chalk (see Calcium carbonate).			
Chamomile flowers, Hungarian, bls.	lb.	1.25	—
Roman, cs.	lb.	1.50	1.75
Chamomile oil, blue Hungarian, bots	lb	350.00	—
Charcoal, activated, NF fib. dms., c.l., works	lb.	.25	.32
fib dms., 5-ton lots, works	lb.	.30½	.32½
fib. dms. smaller lots, works	lb.	.27	.50
Charcoal, black (see Charcoal, activated).			
Charcoal, bone (see Bone black).			
Charcoal hardwood lump bulk, c.l., f.o.b. plant	ton.	55.00	—
briquets, bulk, c.l., f.o.b. plant	ton	78.00	80.00
5-lb. paper bgs., c.l., same basis	ton	106.00	—
25-lb. paper bgs., c.l., f.o.b plant	ton.	87.00	—
40-lb. paper bgs. c.l., same basis	ton	84.00	—
Chenopodium oil NF. cns.	lb.	4.15	5.00
Chicago acid paste, bbls. frt. alld.	lb.	3.21	—
Chinawood oil (see Tung oil).			
Chloral, tech. 94% min., dms., c.l., works	lb.	.23	—
dms., l.c.l., works	lb.	.24	—
tanks, multiple units, 5 cars, works	lb.	.21	—
Chloral hydrate, USP, jars, 1,000-lb lots	lb.	1.00	—
jars, 500-lb. lots	lb	1.03	—
jars, 100-lb lots or less	lb.	1.05	—
Chlordan, agricultural dms., c.l., frt. alld	lb.	.63	—
dms l.c.l 5,000 to 10,000-lb. lots, frt alld	lb.	.68	—
Clarified, dms., c.l., frt. alld.	lb.	.69	—
dms., l.c.l., 5,000-10,000-lb lots, frt. alld	lb.	.70	—
Chlorinated paraffin, 42%, dms., c.l. frt. alld	lb.	.16¼	—
dms l.c.l 10 dms or more, same basis	lb.	.17¼	—
70%, dms., c.l., same basis	lb.	.18½	—
dms l.c.l. 10 dms or more, same basis	lb.	.19½	—
Chlorinated rubber, 5, 10, 20 cps., ctns., c.l., works	lb.	.60	—
ctns., l.c.l., works	lb.	.61	—
125, 1,000 cps., ctns., c.l., works.	lb.	.70	—
ctns., l.c.l., works	lb.	.71	—
Chlorine, liq., cyls., c.l., works, frt equald	lb.	.11	—
cyls., l.c.l. Metropolitan area	lb.	.12½	.13¾
tanks, single units, works, frt. equald 100 lbs.		3.15	—
tanks, multiple units, 5 cars, works, frt equald 100 lbs.		4.03	—
tanks, multiple units 4 cars, same basis 100 lbs.		4.25	—
tanks, multiple units, 2 cars, same basis 100 lbs.		5.25	5.75
tanks, multiple units,, 1 car, same basis 100 lbs.		6.25	7.25
Chloroacetic acid, mono, flake, 99%, purif., c.l.	lb.	.23½	.25½
dms., l.c.l.	lb.	.24½	—
tech. flake, 96-97% dms., c.l., frt equald	lb.	.19	—
dms., l.c.l., frt equald	lb.	.20	—
2-Chloro-4-aminotoluene tech., liq., dms., frt alld	lb	1.03	—
4-Chloro-2-aminotoluene fused, bbls.	lb.	1.38	—
6-Chloro-2-aminotoluene tech., liq., dms., frt alld	lb.	.66	—
m-Chloroaniline dms., c.l. frt alld.	lb.	.75	—
dms., l.c.l., same basis	lb.	.77	—
tanks, same basis	lb.	.73	—
o-Chloroaniline, dms., c.l., frt. alld.	lb.	.52	—
dms., l.c.l., same basis	lb.	.54	—
tanks, same basis	lb.	.50	—
p-Chloroaniline, dms. c.l., frt. alld.	lb.	.77	—
dms., l.c.l., same basis	lb.	.79	—
o-Chlorobenzaldehyde, dms., t.l., works, dlvd to N.Y. Metropolitan area	lb.	1.03	—
dms., l.t.l., same basis	lb.	1.20	—
p-Chlorobenzaldehyde, dms., t.c.l., works, dlvd to N. Y. Metropolitan area	lb.	1.95	—
o-Chlorobenzoic acid, fib dms., t.l., works	lb	1.10	—
fib. dms., smaller lots works	lb	1.25	—
p-Chlorobenzoic acid, fib dms., 2,000-lbs. or more, works.	lb.	2.25	—
fib. dms., less than 2,000-lbs., same basis	lb	2.30	—
Chloroform, tech., dms., c.l. dlvd. E	lb.	.18	—
dms., l.c.l., same basis	lb.	.19	—
tanks, same basis	lb	.17	—
USP, dms., c.l., dlvd	lb.	.27	—
dms., l.c.l., dlvd	lb.	.30	—
tanks, minimum 4,000 gals. dlvd.	lb.	.25	—
2-Chloro-4-nitroaniline, paste, dlvd. E 100% basis	lb.	.81	—
Powd. dlvd E 100% basis	lb.	.86½	—
4-Chloro-2-nitroaniline, powd dlvd. E	lb.	.86	—
4-Chloro-2-nitrophenol, tech., paste, dms. frt alld	lb.	.75	—
4-Chloro-2-nitrotoluene tech., solid, dms., frt alld	lb.	.99	—
6-Chloro-2-nitrotoluene tech., solid, dms., frt. alld	lb.	.17	—
o-Chlorophenol, dms., c.l., frt equald	lb	.37	—
dms. l.c.l. same basis	lb	.38	—
p-Chlorophenol, dms., c.l., frt equald	lb	.37	—
dms. l.c.l. same basis	lb	.38	—
Chloropicrin coml. cyls., 100 lbs. frt alld	lb	1.07	—
cyls. 100 lbs same basis	lb	1.08	—
cyls. 50 lbs., same basis	lb	1.14	—
Chlorosulfonic acid dms., c.l., frt equald	lb	.0465	—
dms., l.c.l. frt equald	lb	.0515	—
tanks, frt. equald	lb	.0415	—
Chlorosulfonic acid, in stainless steel dms ½c per lb higher			
o-Chlorotoluene tech dms., t.l., works	lb	.37	—
dms. l.c.l., l.t.l. same basis	lb	.38	—
Choline bitartrate, fib dms frt adjusted	kilo	2.75	3.00
Choline chloride fib dms. frt adjusted	kilo	2.75	3.00
Choline dihydrogen citrate, fib dms., frt adjusted	kilo	2.75	3.00
Chrome green, CP dark, tgnt medium blue content 1.15%, bbls., dlvd. E. of Rockies	lb.	.43	—
blue content 16-30% bbls., same basis	lb.	.44	—
blue content 31-45% bbls., same basis	lb.	.44	—
blue content 45-49% bbls., same basis	lb.	.45	—
Reduced color 25%	lb.	.20	—
Chrome green prices 1c. higher W of Rockies.			



An enteric coating material, after all, forms a film

In film-forming matters, we are not without experience. We make Eastman C-A-P Cellulose Acetate Phthalate in a special plant under a strict regime of chemical synthesis. Its behavior is uniform and predictable not only in the alimentary tract of the patient, but in the storage and manufacture of the medicament.

The effect does not depend on the assumption that the stomach will empty with timetable precision. The C-A-P film disintegrates rapidly at a pH above 6.8. The disintegration is triggered by intestinal esterases even under the more acidic conditions in the upper part of the small intestine.

That the C-A-P material helps make large-scale enteric coating a completely routine matter can be attributed to its tendency to deposit uniformly, to dry quickly without pinholes, pitting, or roughness. It resists abrasion in tumbling. Properly applied coatings are smooth, glossy, and continuous.

Persons interested are invited to write for technical data, quotation, and help on specific coating problems. Address *Distillation Products Industries,* Rochester 3, N. Y. Sales offices: New York and Chicago • W. M. Gillies, Inc., West Coast • Charles Albert Smith Limited, Montreal and Toronto.

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DPi

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Chrome Orange—Corn Oil

Chrome orange CP bbls., dlvd E. of Rockies lb. .35 - —
Chrome orange prices 1c higher W of Rockies
Chrome yellow CP bbls., dlvd E. of Rockies lb. .35 - —
Chrome yellow price 1c higher W of Rockies
Chromic acid, 99¾%, dms., c.l., works, frt equald lb. .29½- —
dms. l.c.l. dlvd N Y Metropolitan area lb. .30 - .31
Chromic acid NF (see Chromium trioxide)
Chromium acetate, soln. 7½%, dms. 500-2,000-lb lots, works, lb .10 - —
Chromium fluoride bbls., works lb .51 - .52
Chromium oxide, hydrated, bbls., fib dms c.l frt alld lb 1.20 - —
Pure bgs., c.l., frt alld lb 44½- —
bgs l.c.l. same basis lb 45¼- —
Chromium trioxide NF bots lb 1.15 - —
Cinchona bark NF red broken, bgs lb .25 - —
NF yellow broken bgs. lb .35 - .40
Cinnamic acid refd bots lb 2.50 - 3.50
Cinnamic alcohol bots. lb. 1.75 - 2.20
Cinnamic aldehyde dms lb 92 - 1.25
Cinnamon, Ceylon, No. 2, bgs. lb. .62 - —
Ceylon No "0000," bgs lb. 78 - —
Cinnamon bark oil bots lb 35.00 - 70.00
Cinnamon leaf oil, crude, dms lb. 1.60 - 2.00
USP (Cassia), cns. dms lb 8.50 - 13.50

Citral, CP, bots. lb. 3.75 - 4.25
Extra, bots. lb. 4.50 - 6.10
Citric acid USP anhyd., fine gran., bgs., dms., c.l lb. .29½- .30
bgs., dms., 10,000-lb lots, 1 shipt lb. .30 - .30½
bgs. dms. smaller lots lb. .30½- .31
USP, hydrous, fine gran., bgs., dms., c.l lb. .27½- .28
bgs., dms., 10,000-lb lots, 1 shipt lb. .28 - .28½
bgs. dms., smaller lots lb. 29 - .29½
Powdered citric acid ½c. per lb higher.
Citronella oil, Ceylon, dms. lb. .90 - 1.05
Java-type, dms. lb. .65 - 1.25
Citronellal, bots., dms lb 1.60 - 2.10
Citronellol, bots., dms lb. 2.30 - 3.70
Civet, artif. bots. lb 13.75 -15.00
Nat. bots oz. 8.50 -15.00
Clay, ball, dom., airfloated, bgs., c.l., Tenn ton.17.50 -21.50
crushed shed moisture, bulk, c.l. Tenn ton 8.00 -11.00
Clay ball, imp., airfloated bgs, c.l., Atl. port net-ton.42.00 -45.75
lump, bulk, Atl port net-ton.29.50 -35.75
Clay, China, dom., dry-grd. air-floated, 99% 325 mesh, Georgia bgs. c.l. works.ton.10.00 -12.00
Georgia, bgs. l.c.l. works. ton.15.50 - —
China, dom., airfloated, 99%, 300 mesh bgs. c.l., Georgia, works ton.13.50 -14.50
bgs., l.c.l., ex-whse ton.35.00 -36.00

Clay, China, imp., white, lump, bulk, c.l., ex dock, Philadelphia, Portland, Me. long-ton.20.00 -35.00
white, powd., bgs., c.l., ex dock. net-ton.50.00 - —
bgs., l.c.l., ex whse net-ton.60.00 -70.00
Cleaners Naphtha petroleum, 105°F Flash, tankcars, New Jersey and New York gal. .18 - —
Group 3 gal. .12875- —
Houston, Texas gal. .145 - —
140°F Flash, tankcars, New Jersey or New York gal. .205 - —
Group 3 gal. .154 - —
Houston, Texas gal. .17 - —
Cleve's acid, tech., mixed, solid, dms., frt. alld lb. 1.05 - —
1,6, tech, solid, dms., frt. alld lb. .77 - —
1,7, tech., dms., frt. alld. lb. 2.20 - —
Cloves, Madagascar, bgs. lb. .40½- —
Zanzibar, bgs. lb. .42½- —
Clove bud oil, USP, dms. lb. 2.70 - 3.60
Clove leaf oil, crude, dms. lb. 1.35 - 1.80
CMC, crude, 96.4% low or medium vis. bgs. or fib. dms., 23,000 lbs., dlvd. E., 100% basis lb. .41½- —
96.4% low, or medium vis., bgs. or fib. dms., 23,000 lbs. dlvd. E., 100% basis lb. .43½- —
65%, low or medium vis., bgs., or fib. dms., c.l., dlvd. E., 100% basis lb. .41½- —
bgs. or fib. dms., l.c.l., dlvd. E., 100% basis lb. .43½- —
CMC, purif, high vis. (see Cellulose gum).

CMC, standard, low or medium vis., bgs., 23,000 lbs., works, frt. alld lb. .37 - —
bgs., smaller lots, same basis, lb. .59 - —
CMC prices W of the Rockies are 2c. per lb. lower and are on a works basis.
Coaltar, crude, resale for solns., tanks, works gal. .17 - —
Refd., resale, indust., dms., c.l., ex whse gal. .35 - —
dms., l.c.l., ex whse. gal. .39 - —
tanks, works gal. .20½- —
Coaltar pitch, aluminum, bulk, works ton.44.00 - —
Carbon and indust., bulk, works ton 44.00 - —
Core, bulk, works ton.40.50 - —
Fiber bulk, works ton 48.00 - —
Roofing, 140 155°F., Federal Specification RP-381 Type 1, tanks, works ton.41.00 - —
Cobalt acetate, 23.7% Co., dms. dlvd lb. 1.04 - —
Cobalt blue genuine 250 lb bbls., dlvd. E. of Rockies lb 4.90 - —
Cobalt blue prices 1c. higher W. of Rockies.
Cobalt blue, imitation (see Ultramarine blue).
Cobalt carbonate, 48% Co., powd., bgs., dlvd lb. 1.45 - —
Cobalt chloride, 24.2% Co., dms., dlvd lb. .99 - —
Cobalt hydrate, 60-61% Co., dms., dlvd lb 2.05 - —
Cobalt linoleate, fused 8½% Co., dms lb. .71½- —
Liq., 6% Co. dms. lb. .57½- —
Cobalt metal, 97-99%, dms., f.o.b. carrier lb 1.75 - —
Cobalt naphthenate, liq. 6% Co., dms. dlvd lb. .48¾- —
Cobalt nitrate, 20.1% Co. bbls. dlvd. lb. .80 - —
Cobalt oxide, black, ceramic grade, 72½-73½% Co., kgs., dlvd. E. of Mississippi R lb. 1.33 - —
70-71% Co. kgs same basis lb 1.29 - —
Cobalt oxide prices W of Mississippi R. 3c. per pound higher.
Cobalt phosphate, powd., 32.1% Co., dms., dlvd lb 1.35 - —
Cobalt resinate, fused, 3% Co., dms. lb. .33½- —
Cobalt sulfate, cryst., 21% Co., dms. dlvd lb. .64 - —
Monohydrated, 33% Co., dms., dlvd lb. 1.09 - —
Cobalt tallate, 6% Co., dms., dlvd. lb. .44 - —
Cocaine, USP, cns., 100-oz. lots, f.o.b. works oz.17.50 - —
Cocaine hydrochloride, cns., 100-oz lots, f.o.b. works oz.13.75 - —
Cocillana bark, bls. lb. .18 - .20
Cocoa butter, bgs. lb. .59 - .64
Coconut oil, crude, tanks, New York. lb. .19 - —
tanks, Pac. coast lb. .17¼- —
Refd., deodorized, dms. lb. .26 - .27
Coconut oil acids, dist., dms. lb. .30½- .33
tanks lb. .28 - —
Double dist. (stripped), dms lb. .31½- .34
tanks lb. .29 - —
Cod oil, dms., spot lb. .08¼- .08¾
Codeine, NF, cns., 100-oz lots oz 13.25 - —
Codeine hydrochloride, cns., 100-oz. lots oz.11.75 - —
Codeine phosphate, USP, cns., 100-oz. lots oz.10.25 - —
Codeine sulfate, USP cns., 100-oz. lots oz.10.75 - —
Codliver oil, USP, dms. gal. 1.40 - 1.70
Cohosh root, black, bls lb. .20 - .25
Blue, bls. lb. .20 - .25
Colchicine, USP, bots oz.29.00 - —
Colchicum root, bls lb. .35 - .45
Colchicum seed, bgs lb. 1.00 - 1.25
Collodion USP, dms lb. .32½- —
USP, flexible, dms lb. .34 - —
Colocynth pulp, bls lb. .75 - —
Colombo root, bls lb. .16 - .18
Condurango bark, bls lb. .18 - .20
Congo copal gum, No. 1, bgs lb. .25 - .27
No 2 bgs. lb. .22 - .24
No. 3, bgs. lb. .16½- .19
Copaiba balsam, cns., dms lb. .60 - .65
Copaiba oil, cns. lb. 1.35 - 2.00
Copper acetate, bbls., c.l., works. lb. .53 - —
bbls., l.c.l., works lb. .54 - —
Copper carbonate, 55%, bgs., c.l., works lb. .3635- —
bgs., l.c.l., works lb. .3785- —
Copper chloride, cupric, anhyd., dms., works lb. .45½- 46
Cryst., dihydrate dms. works, lb. .31 - .31¼
Cryst., dried, dms., works lb. 39¼- .39¾
Copper chloride, cuprous, dms., works lb. .4135- .4435
Copper cyanide, tech., dms., 20,000-lb lots or more lb. .609 - —
dms., 1,000-lb. lots or more lb. .619 - —
dms., smaller lots lb. .639 - .65
Copper gluconate, dms. lb. 3.20 - —
Copper hydrate dms., c.l., frt. alld. E. of Miss lb. .51¾- —
dms., l.c.l., same basis lb. .52¼- —
Copper metal, electrolytic, dlvd. Valley basis lb. .33 - .36
Copper naphthenate, liq., 8% Cu, dms., frt. alld lb. .26½- —
Copper nitrate, tech., cryst., dms., works lb. .30¾- .32¾
Copper oleate, solid, 9% Cu, dms., works lb. .45 - —
Copper oxide, black, bbls., 100-5,000-lb. lots, works lb. .49¼- —
Copper oxide, red, 97%, USN Type Red, 97%, USN Type 1, bbls., 100-5,000-lb. lots lb. .50½- —
90%, USN Type II, bbls., 100-5,000-lb. lots or more, works. lb. .48½- —
Copper quinolinolate, 18% Cu, dms., ton lots lb. 4.25 - —
10% active quinolinolate, dms lb. 1.14 - 1.15
Copper resinate, precip, dms., frt. alld lb. .41½- —
Copper sulfate, CP, gran., dms., works lb. .1885- —
CP, cryst., 99%, bgs., c.l., works. 100 lbs.13.00 - —
bgs., l.c.l., works 100 lbs.13.25 -15.75
Copper sulfate, monohydrated, 35%, dms., c.l., works 100 lbs.24.00 - —
dms., l.c.l., works 100 lbs.24.75 - —
Copper sulfate, tribasic distributors, bgs., c.l., works 100 lbs.29.60 - —
bgs., l.c.l., works 100 lbs.31.10 - —
Copper undecylenate, dms. lb 2.75 - —
Copra, Atl., Gulf ports, c.i.f. lb.242.50 - —
Pac. ports, c.i.f. lb.237.50 - —
Coriander oil, USP, bots lb. 9.00 -10.00
Coriander seed, Moroccan, bgs lb. .08 - —
Rumanian, bgs. lb. .07½- —
Yugoslavian, bgs. lb. .08½- —
Corn oil, crude, tanks, works lb. .13¼- —
Foots (soapstock) acid 95%, tanks, New York lb. .05⅝- —
Refd., salad, dms. lb. .1898- .1925
tanks lb. .1698- —

TC TENNESSEE CORPORATION

INDUSTRIAL CHEMICALS

We mine Copper, Iron, Zinc and Sulfur and are basic producers of their chemical derivatives. Our technical know-how in these basic materials is your assurance of exacting quality control and strict uniform consistency.

SULFUR

SULFURIC ACID All grades and strengths from 60° Baume through the various Oleums.

LIQUID SULFUR DIOXIDE Highest commercial quality, available in tank cars, tank wagons, ton cylinders and 150-lb. cylinders.

SODIUM HYDROSULFITE T-C HYDRO is a dry, white, free flowing crystalline powder of uniform particle size and structure. It is dust free, assuring highest stability and uniformity.

CHLOROSULFONIC ACID Iron less than 1.0 ppm as loaded. Water White. Delivered in glass-lined tank wagons, also in stainless steel drums.

PARA TOLUENE SULFONIC ACID, ANHYDROUS Other organic Sulfonic Acids.

COPPER

COPPER SULFATE Industrial Crystals and all commercial grades.

MONOHYDRATED COPPER SULFATE 35% Copper as metallic packaged in steel drums at no extra cost.

COPPER CARBONATE 55% Copper as metallic. Light and dense grades.

CUPRIC CHLORIDE 37% Copper as metallic. Available in polyethylene lined drums or bags.

IRON

FERRIC IRON SULFATE Partially hydrated free flowing granular. Available in bags, fibre drums or bulk.

ZINC

MONOHYDRATED ZINC SULFATE 36% Zinc as metallic. White, free flowing powder.

ZINC OXIDE Secondary.

MANGANESE

MANGANESE SULFATE, Fertilizer Grade.

MONOHYDRATED MANGANESE SULFATE Highest purity, technical grade . . . NOT A BY-PRODUCT.

MANGANOUS OXIDE Minimum 48% Manganese as metallic. Feeds; fertilizers, spray or dust grades.

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SODIUM SILICOFLUORIDE

POTASSIUM SILICOFLUORIDE

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TC TENNESSEE CORPORATION

TENNESSEE CORPORATION

615-629 GRANT BUILDING, ATLANTA 3, GEORGIA

Corn oil, acids, dist., dms.	lb.	.16¾-	.19¼
tanks	lb.	.14¼-	—
Corn sugar, tanners, chipped, paper bgs., c.l., 60,000 lbs. min.	100 lbs.	7.30	—
paper bgs., l.c.l.	100 lbs.	7.45	—
Corn syrup, 42° Be., non-ret. dms., c.l.	100 lbs.	7.31	—
non-ret. dms., l.c.l.	100 lbs.	7.46	—
Corrosive sublimate (see Mercuric chloride).			
Cortisone acetate, USP, bots., kilo or more	gram.	1.05	1.10
Costus oil, bots.	oz.	6.00	—
Cottonseed meal, 41%, bgs., Memphis	ton.	59.00	—
Cottonseed oil, crude, tanks, South East	lb.	.09½-	.09⅝
tanks, Valley	lb.	.09⅝-	—
tanks, Texas, Lubbock	lb.	.09½-	—
tanks, Texas, Waco	lb.	.09⅜-	.09½
Foots, (soapstock), acid 95%, tanks, New York	lb.	.04	—
Refd., salad, dms.		.14½-	.14¾
tanks	lb.	.12½-	—
Cottonseed oil acids, dist., dms	lb	.16¾	.19¼
tanks	lb	14¼	—
Coumarin, NF, cryst., dms	lb.	3.30	—
Cramp bark, NF, bls.	lb.	.90	1.00
Cream of tartar (see Potassium bitartrate).			
Creosote carbonate, NF, bots. chys.	lb	3.05	3.26
Creosote, coaltar, crude, tanks, works, frt adjusted	gal.	.24	—
Crude, soln 80%, tanks, works,	gal.	.226	—
Refd., dms., c.l., works	gal.	.50	—
dms., l.c.l., same basis	gal.	.62	—
tanks, same basis	gal	.38	—
West Coast creosote prices computed on a basis of 24c per gallon for straight oil and 20c per gallon for coaltar.			
Creosote, beechwood, chys., dms., f.o.b. works, dlvd in Metropolitan area	lb	1.72	1.77
Hardwood, NF, chys, dms, same basis	lb	1.42	1.47
Pinewood, dms, incl. c.l., works	lb	.0561-	—
dms incl. l.c.l. works	lb.	.0634-	—
dms incl. l.c.l. ex whse, New York	lb	.0745-	—
tanks, works	lb.	.0460-	—
Creosote oil (see Creosote coaltar).			
Cresol, tech., 50% below 204°C., dry above 207°C., wide distillation range, non-ret. dms, c.l. frt. alld	lb	.16½-	—
l.c.l., same basis	lb.	.17½-	—
tanks, same basis	lb.	.145	—
USP, non-ret. dms., c.l., same basis	lb.	.18	—
non-ret. dms. l.c.l., same basis	lb.	.19	—
tanks, same basis	lb.	.16	—
m-Cresol, 95-98% dms, c.l., works	lb.	.60	—
dms., l.c.l. works	lb.	.61	—
m-p-Cresol, 5-95% 3°C., dms., c.l., frt. equald	lb.	.18	—
dms., l.c.l., same basis	lb.	.19	—
tanks, same basis	lb.	.16	—
2.97% 2°C., dms., c.l., frt. equald.	lb.	.22	—
dms., l.c.l., same basis	lb.	.23	—
tanks, same basis	lb.	.20	—
o-Cresol, 30.5°C m.p. and over, ret. dms., c.l., frt. equald	lb.	.17	—
ret. dms., l.c.l., same basis	lb.	.18	—
tanks, same basis	lb.	.15	—
30°-30.49°C. m.p., dms., c.l., frt. equald	lb.	.16½-	—
ret. dms., l.c.l., same basis	lb.	.17½-	—
tanks, same basis	lb.	.14½-	—
29°-29.9°C. m.p., dms., c.l., frt. equald	lb.	.16	—
ret. dms., l.c.l., same basis	lb.	.17	—
tanks, same basis	lb.	.14	—
25°-28°C. m.p., dms., c.l., frt. equald	lb.	.15	—
ret. dms., l.c.l., same basis	lb.	.16	—
tanks, same basis	lb.	.13	—
p-Cresol, 98%, dms., c.l., dlvd	lb.	.52	—
dms., l.c.l., dlvd	lb.	.53	—
tanks, dlvd.	lb.	.49	—
2,3-Cresotic acid, dms., ton lots, works	lb.	.70	—
dms., smaller lots, works	lb.	.72	—
p-Cresyl methyl ether, cns.	lb.	1.80	2.05
Cresylic acid, coaltar, dom., meta-para content above 25%, resins and tricresyl phosphate grades, dms., c.l., t.l., frt equald	gal.	1.35	—
dms., l.c.l., same basis	gal.	1.40	—
tanks, same bassi	gal.	1.15	—
Cresylic acid, coaltar, dom., meta-para content 25% or less, dms., c.l., t.l., same basis	gal.	1.20	—
dms., l.c.l., same basis	gal.	1.25	—
tanks, frt. equald	gal.	1.00	—
Cresylic acid, coaltar, imp., meta-para content, 25% or less, f.o.b. works, frt. equald. to competitive points, 50 dms. or more	gal.	1.03½-	—
less than 50 dms., same basis	gal.	1.05	1.15
tanks, same basis	gal.	1.00	—
Crotonaldehyde, 91-93%, dms., l.c.l., works	lb.	.25	—
Crotonic acid, dms., 200 lbs. or more, l.c.l., dlvd	lb.	.36	—
Cryolite, nat., indust., bgs., c.l., works	100 lbs.	13.00	—
bgs., l.c.l., works	100 lbs.	14.25	—
Cube root, powd., 5% rotenone, bgs., t.l., works	lb.	.21	—
bgs., l.t.l., works	lb.	.22	—
Cubeb berries, NF, bgs.	lb.	1.00	—
Powd., cs.	lb.	1.15	—
Cubeb oil, cns.	lb.	12.00	16.00
Cumene, dms., c.l., works	lb.	.12	—
dms., l.c.l., works	lb.	.14	—
tanks, works	lb.	.11	—
Cumin seed, Iranian, bgs.	lb.	.30	—
Moroccan, bgs.	lb.	.31	—
Turkish, bgs.	lb.	.27	—
Cumin seed oil, bots., cns.	lb.	15.50	17.00
Cyanamide, fertilizer, mixing grade, 21% N gran. bgs., Niagara Falls Ont., contract	ton	57.00	—
Fertilizer, pulv., 21% N, bgs., works, unit-ton		2.85	—
Indust. grade, bgs., c.l., works	ton.	75.00	—
bgs., l.c.l., works	ton.	96.00	—
Indust. grade, 6-16 mesh, dms., c.l., works	ton.	120.00	—
dms., l.c.l., works	ton.	140.00	—
Cyclohexane, 99%, tech., dms., c.l., dlvd. E. of Rockies	gal.	1.02	—
dms., l.c.l., same basis	gal.	1.10	—
dms., c.l., dlvd. W. of Rockies	gal.	.77	—
dms., l.c.l., same basis	gal.	.85	—
tanks, works	gal.	.55	—
98%, tech., 40-dm. lots or more, f.o.b. works	gal.	.59	—
5-39 dms., same basis	gal.	.60	—
tanks, same basis	gal.	.36	—
Cyclohexanol, tech., dms., c.l., works, frt alld E	lb.	.28½-	—
dms., l.c.l., works, same basis.	lb.	.29½-	—
tanks, works, same basis	lb.	.26	—
Cyclohexanone, tech., dms., c.l., works	lb.	.33½-	—
dms., l.c.l., works	lb.	.34½-	—
tanks, works	lb.	.31	—
Cyclohexylamine, dms., c.l., works	lb.	.49	—
dms., l.c.l., works	lb.	.50	—
tanks, works	lb.	.47	—
Cypress oil, bots.	lb.	5.30	—

D

2,4-D, tech., bgs., dms., c.l., works, frt. equald	lb.	.40	—
bgs., dms., l.c.l., same basis	lb.	.45	.49
2,4-D butyl ester, dms., c.l., works.	lb.	.43	—
dms., l.c.l., same basis	lb.	.48	.52
tanks, same basis	lb.	.42	—
2,4-D isopropyl ester, dms., c.l., works	lb.	.43	—
dms., l.c.l., works	lb.	.48	.52
tanks, works	lb.	.42	—
Dammar gum, Batavia, A/E, cs	lb.	No stocks.	
East India, Batu, bold, bgs.	lb.	.14¼-	.16½
nubs and chips, bgs.	lb.	.08½-	.09½
black, bold, bgs	lb.	.14½-	.16½
nubs and chips, bgs.	lb.	.12¼-	.13½
unscraped, bgs.	lb.	.13	.14½
East India, Batu, pale, chips, bgs.	lb.	.14¼-	.16
nubs and chips, bgs.	lb.	.09	.10
Siam, cs.	lb.	.30	.33
Singapore, No. 1, bgs.	lb.	.35	.40
No. 2, bgs.	lb.	.29	.32
No. 3, bgs.	lb.	No stocks.	
dust, bgs.	lb.	.17	.19
Dandelion root, bls.	lb.	.28	.32
DDD, tech., flake, grd., fib, dms., c.l., works	lb.	.45	.47
fib, dms., l.c.l., works	lb.	.46	.48
DDT, flake or fump, bgs., c.l., dlvd	lb.	.23	—
bgs., smaller lots same basis.	lb.	.25	—
fib, dms., c.l., same basis	lb.	.24	—
fib, dms., smaller lots, same basis	lb.	.26	—
Powdered DDT 1c. per pound higher.			
DDVP (see Dimethyl dichlorovinyl phosphate).			
1-Decanol, tech., dms., c.l., dlvd. E.	lb.	.43½-	—
dms., l.c.l., dlvd. E	lb.	.45½-	—
tanks, dlvd. E	lb.	.41	—
Decyl alcohol, mixed isomers, dms., c.l., dlvd	lb.	.23½-	—
dms., l.c.l., dlvd	lb.	.25	—
tanks, dlvd.	lb.	.21	—
Perfume grade, bots.	lb.	1.80	2.00
Decyl alcohol, normal (see 1-Decanol)			
Deertongue leaves, bls.	lb.	.55	.60
Defluorinated phosphate, feed grade, 13% P, paper bgs., c.l., t.l., works	ton.	53.00	—
18% P, paper bgs., c.l., works	ton.	66.25	71.80
19% P, paper bgs, works, Houston, Tex., c.l., t.l.	ton.	74.35	—
Prices of defluorinated phosphate in bulk $3 per ton less than bg. c.l. prices.			
Degras, common, bbls	lb	.10	.13
Neutral, bbls.	lb	.21	.23
Denatured alcohol, ethyl CD-12, CD-13, CD-14, CD-17, dms., c.l., dlvd E. of Rockies	gal.	69½-	—
dms., l.c.l., same basis	gal.	74½	.80⅛
tanks, dlvd., same basis	gal.	53½-	—
Tankcar sales require written authorization by Alcohol and Tobacco Tax Division			
Denatured alcohol, ethyl, proprietary solvent, dms., c.l., dlvd. E. of Rockies	gal.	72	—
dms., l.c.l., same basis	gal.	77	.83
tanks, same basis	gal	56	—
Tankcar sales require written authorization by Alcohol and Tobacco Tax Division.			
Denatured alcohol, ethyl, SD1, dms., dlvd E of Rockies	gal.	70½-	—
dms., l.c.l., same basis	gal.	75½	.81⅛
tanks, same basis	gal.	.54½-	—
SD2B, dms., c.l., dlvd. E. of Rockies	gal.	.69	—
dms., l.c.l., same basis	gal.	74	.80
tanks, same basis	gal.	.53	—
SD3A, dms., c.l., dlvd. E. of Rockies	gal.	.68	—
dms., l.c.l., same basis	gal.	.73	.79
tanks, same basis	gal.	.52	—
SD23A, dms., l.c.l., dlvd. E. of Rockies	gal.	.70½-	—
dms., l.c.l., same basis	gal.	75½-	.81⅛
tanks, same basis	gal.	.54½-	—

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RCl · HCl

R= $Me_2NCH_2CH_2$— (DMC*)
$Et_2NCH_2CH_2$— (DEC*)
$iPr_2NCH_2CH_2$— (DIC*)
$Me_2NCH_2CH_2CH_2$— (DMPC*)
$Et_2NCH_2CH_2CH_2$— (DEPC*)
$Me_2NCH_2CH(CH_3)CH_2$— (DMMPC*)
$Me_2NCH_2CH(CH_3)$— (DMIC*)

*Michigan Chemical product names for the chloride hydrochloride form of R. All commercially available.

Alkylation of amines:

$NH_3 + RCl \longrightarrow RNH_2$
$RNH_2 + RCl \longrightarrow RRNH$
$R_2NH \xrightarrow[2.\ RCl]{1.\ NaNH_2} RR_2N$
$R_3N + RCl \longrightarrow RR_3N^+Cl^-$

Alkylation of alcohols and acids:

$ROH \xrightarrow[2.\ RCl]{1.\ Na} ROR$
$RCO_2H + RCl \xrightarrow{base} RCO_2R$

Alkylation of active methylene groups:

$CH_2 \xrightarrow[2.\ RCl]{1.\ Na\ +\ alcohol} CHR$

Formation of Grignard reagents:

$RCl + Mg \longrightarrow RMgCl$

Reaction with metal salts:

$RCl + NaI \longrightarrow RI + NaCl$

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C-59-4

V177 FEB 60 XUM

Denatured Alcohol—Dihydrostreptomycin Hydrochloride

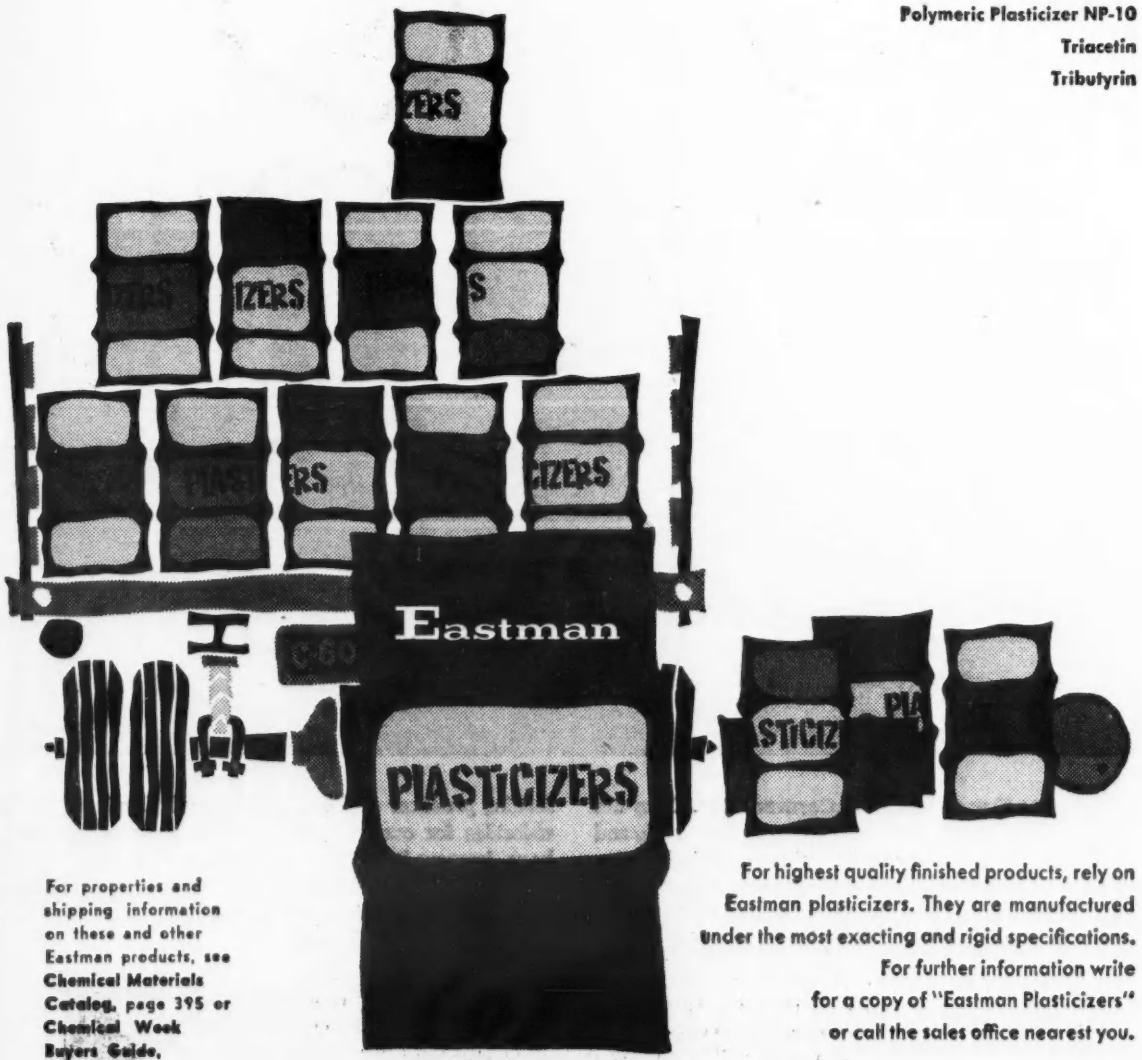
Denatured alcohol, ethyl, SD23H, dms., c.l., dlvd. E. of Rockies, gal.	.71	-	—
dms., l.c.l., same basis gal.	.76	-	.82
tanks, same basis gal.	.55	-	—
SD29, dms., c.l., dlvd. E. of Rockies gal.	.69½	-	—
dms., l.c.l., same basis gal.	74½	-	.80½
tanks, same basis gal.	.53½	-	—
SD30, dms., c.l., dlvd. E. of Rockies gal.	.68	-	—
dms., l.c.l., same basis gal.	.73	-	.79
tanks, same basis gal.	.52	-	—
SD-35A, dms., c.l., dlvd. E. of Rockies gal.	.71	-	—
dms., l.c.l., same basis gal.	.76	-	.82
tanks, same basis gal.	.55	-	—
SD-40, dms., c.l., dlvd. E. of Rockies gal.	.70½	-	—
dms., l.c.l. same basis gal.	75½	-	.81½
tanks, same basis gal.	.54½	-	—

For anhyd alcohol on above formulas prices are 7c per gal higher
West coast dlvd prices are the same as eastern prices, except in Idaho, Montana, Oregon, and Washington where a 5c differential on tankcars is maintained

d-Desoxyephedrine hydrochloride, dms lb	15.00	-	17.00
dl-Desoxyephedrine hydrochloride, dms lb	6.50	-	—
Dextrin corn gum, paper bgs., c.l., 100 lbs	9.38	-	—
paper bgs., l.c.l 100 lbs	9.53	-	—
canary dark, paper bgs., c.l. 100 lbs	9.22	-	—
paper bgs., l.c.l. 100 lbs	9.37	-	—
Dextrin corn gum, indust. grade, 6-16 mesh, dms., canary light, paper bgs., c.l. 100 lbs	9.12	-	—
paper bgs., l.c.l 100 lbs	9.27	-	—
white, paper bgs., c.l 100 lbs	8.96	-	—
paper bgs., l.c.l 100 lbs	9.11	-	—
Corn dextrin in cotton bgs. 15c. per 100 lbs higher			
Dextrose, anhyd., comL, bgs., c.l., 100 lbs	8.60	-	—
bgs., l.c.l. 100 lbs	8.75	-	—
Anhyd., special, aluminum foil lined fib. dms., 200-lb. dms 100 lbs	14.70	-	—
100-lb. dms. 100 lbs	15.20	-	—
Hydrated, coml., bgs., c.l., ex whse 100 lbs	7.60	-	—
bgs., c.l., ex whse 100 lbs	7.75	-	—
USP, dms. lb.	.19¾	-	—
Diacetyl, flavor grade bots lb.	4.30		4.55
Di-sec-amyl phenol, dms., c.l., works lb.	.32	-	—
dms., l.c.l., works lb.	.33	-	—
tanks, works lb.	.29½	-	—
Di-tert-amyl phenol, dms., c.l., works lb.	.32	-	—
dms., l.c.l., works lb.	.33	-	—
tanks, works lb.	.29½	-	—
Diacetone alcohol, acetone-free, dms. c.l., dlvd lb.	.15¼	-	—
dms., l.c.l., dlvd lb.	.17	-	—
tanks, dlvd lb.	.13	-	—
Tech., dms., c.l., dlvd lb.	.15	-	—
dms., l.c.l., dlvd lb.	.16½	-	—
tanks, dlvd. lb.	.12½	-	—
Diallylamine, dms., c.l., dlvd lb.	.98½	-	—
dms., l.c.l., dlvd lb.	1.00	-	—
tanks, dlvd. lb.	.98	-	—
o-Dianisidine, dry, tech., fib. dms. lb.	2.00	-	—
Dibenzyl sebacate, dms. c.l., works, lb.	.93	-	—
dms., l.c.l., same basis lb.	.94	-	—
tanks, same basis lb.	.91	-	—
Dibromobenzene, bgs., 500-lb. lots, lb.	.55	-	—
2,6-Di-tert-butyl-p-cresol, feed grade, c.l., t.l., dms., dlvd lb.	.65	-	—
l.t.l., dms., same basis lb.	.68	-	—
Food grade, c.l., t.l., dms., dlvd. lb.	.65	-	—
dms., l.t.l., same basis lb.	.68	-	1.10
Tech., dms., c.l., t.l., dlvd lb.	.57	-	—
dms., l.c.l., same basis lb.	.60	-	—
tanks, same basis lb.	.54	-	—
Dibutyl fumarate dms., c.l., t.l., dlvd. E lb.	.31½	-	—
dms., l.c.l., t.l., dlvd. E lb.	.33	-	—
tanks, dlvd. E lb.	.29	-	—
Dibutyl maleate, dms., c.l., t.l., dlvd. E lb.	.31½	-	—
dms., l.c.l., t.l., dlvd. E lb.	.33	-	—
tanks, dlvd. E lb.	.29	-	—
Dibutyl phthalate, dms., c.l., dlvd. E. lb.	.28½	-	—
dms., l.c.l., same basis lb.	.30	-	—
tankcars, tanktrucks, 2.000 gals., same basis lb.	.26	-	—
tanktrucks, 1,000-1,999 gals., same basis lb.	.26½	-	—
Dibutyl sebacate, dms., c.l., works, lb.	.67½	-	—
dms., l.c.l., works lb.	.68½	-	—
tanks, works lb.	.65½	-	—
Dibutyl tartrate, dms., works, frt. alld lb.	.65½	-	—
Dibutylamine, dms., c.l., dlvd lb.	.85½	-	—
dms., l.c.l., same basis lb.	.87	-	—
tanks, same basis lb.	.83	-	—
Dicapryl phthalate, dms., c.l., dlvd. lb.	.27½	-	—
dms., l.c.l., dlvd. lb.	.29	-	—
tanks, dlvd. lb.	.25	-	—
Dicapryl sebacate, dms., c.l., works. lb.	.63	-	—
dms., l.c.l., works lb.	.63½	-	.64
tanks, works lb.	.61	-	—
2,5-Dichloroaniline, dms., works lb.	.83	-	—
3,4-Dichloroaniline, tech., solid, tanks, frt. alld lb.	.73	-	—
o-Dichlorobenzene, dms., c.l., frt. alld. E lb.	.12¾	-	—
dms., l.c.l., same basis lb.	.13¾	-	—
tanks, same basis lb.	.11	-	—
p-Dichlorobenzene, dms., c.l., f.o.b., works, frt. alld. E lb.	.12	-	—
dms., 2,000 lbs. or more same basis, lb.	.14½	-	—
1,4,-Dichlorobutane, dms., c.l. or t.l., works lb.	.33½	-	—
dms., l.c.l., or l.t.l., works lb.	.34	-	—
tanks, works lb.	.32	-	—
Dichlorodiphenyltrichloroethane (see DDT).			
2,2-Dichloroethyl ether, dms., c.l., t.l., dlvd. E lb.	.15½	-	—
dms., l.c.l., t.l., same basis lb.	.17	-	—
tanks, same basis lb.	.13	-	—
Dichloroisocyanuric acid, dms., c.l., t.l., frt. equald. lb.	.65	-	—
dms., l.c.l., same basis lb.	.75	-	—
Dichloropentanes, dist., dms., c.l., works lb.	.05	-	—
dms., l.c.l., works lb.	.06	-	—
tanks, works lb.	.03	-	—
Dichlorophenoxyacetic acid (see 2,4-D).			
Dicyclopentadiene, dms., c.l., f.o.b. works lb.	.14½	-	—
dms., l.c.l., same basis lb.	.14¾	-	—
tanks, same basis lb.	.12	-	—
Dicyclohexylamine dms., c.l., works, lb.	.54	-	—
dms., l.c.l. works lb.	.55	-	—
tanks, works lb.	.53	-	—
Dicyclohexyl phthalate, gran., fib. dms., c.l., works. frt. alld. lb.	.46½	-	—
fib. dms., l.c.l., same basis lb.	.48	-	—
Didecyl phthalate, dms. c.l., works. lb.	.28½	-	—
dms., l.c.l., same basis lb.	.30	-	—
tankcars, tanktrucks, 2,000 gals., lb.	.26	-	—
tanktrucks, 1,000-1,999 gals, same basis lb.	.26½	-	—
Dieldrin, dms., c.l., dlvd lb.	1.85	-	—
dms., l.c.l., dlvd lb.	1.90	-	—
Diethanolamine, dms., c.l., dlvd E. lb.	.27	-	—
dms., l.c.l., same basis lb.	.28½	-	—
tanks, same basis lb.	.24½	-	—
Diethanolamine lauryl sulfate, dms., c.l., frt. alld lb.	.27½	-	—
dms., l.t.l., frt. alld lb.	.28½	-	—
tanks, frt. alld lb.	.26½	-	—
Diethyl barbituric acid (see Barbital).			
Diethyl carbonate, dms. c.l., f.o.b. works lb.	.47½	-	—
dms., l.c.l., same basis lb.	.48½	-	—
tanks, same basis lb.	.45	-	—
Diethyl ethanolamines, dms., c.l., dlvd lb.	.69½	-	—
dms., l.c.l., dlvd. lb.	.71	-	—
tanks, dlvd. lb.	.67	-	—
Diethyl oxalate, dms., c.l., f.o.b. works lb.	.42½	-	—
dms., l.c.l., same basis lb.	.43½	-	—
tanks, same basis lb.	.40	-	—
Diethyl phthalate, dms., c.l., dlvd. lb.	.27½	-	—
dms., l.c.l., dlvd lb.	.29	-	—
tanktrucks, 1,000-1,999 gals., same basis lb.	.26½	-	—
tankcars, tanktrucks, 2,000-lb. lots, same basis lb.	.26	-	—
Diethyl sulfate dms. c.l. works lb.	.19½	-	—
dms., l.c.l., works lb.	.20¼	-	—
tanks, works lb.	.17½	-	—
Diethyl thiourea, dms., c.l., t.l., works lb.	.58	-	—
dms., l.c.l., same basis lb.	.59	-	—
Diethyl toluamide, 90-95% meta isomer, dms., c.l., t.l., works lb.	2.30	-	—
5-44 dm lots, works lb.	2.35	-	—
1-4 dm lots, works lb.	2.40	-	—
N,N-Diethyl-m-toluidine tech., liq., tanks, frt. alld lb.	.83	-	—
Diethylamine, dms., c.l. dlvd. E lb.	.52	-	—
dms., l.c.l. same basis lb.	.53½	-	—
tanks, same basis lb.	.49½	-	—
N,N-Diethylaniline dms., c.l., frt. alld lb.	.57	-	—
dms., l.c.l., same basis lb.	.58	-	—
tanks, same basis lb.	.55	-	—
Diethylbenzene, dms., t.l., frt. alld. lb.	.16½	-	—
Di-2-ethylhexyl adipate (see Dioctyl adipate).			
Di-2-ethylhexyl phthalate (see Dioctyl phthalate).			
Diethylene glycol, dms., c.l., dlvd. E lb.	.17¾	-	—
dms., l.c.l., same basis lb.	.19¼	-	—
tanks, same basis lb.	.15¼	-	—
Diethylene glycol diethyl ether, dms., c.l., works lb.	.51½	-	—
dms., l.c.l., works lb.	.52¼	-	—
Diethylene glycol monobutyl ether, c.l. dms., works lb.	.30¾	-	—
dms., l.c.l., works lb.	.32¼	-	—
tanks, dlvd. E lb.	.28¼	-	—
Diethylene glycol monobutyl ether acetate, dms., c.l., works lb.	.30¾	-	—
dms., l.c.l., works lb.	.31½	-	—
tanks, dlvd. E lb.	.28¾	-	—
Diethylene glycol monoethyl ether, dms., c.l., dlvd lb.	.22½	-	—
dms., l.c.l., dlvd lb.	.24	-	—
tanks, dlvd. E lb.	.20	-	—
Diethylene glycol monoethyl ether acetate, dms., c.l., works lb.	.27¼	-	—
dms., l.c.l., works lb.	.28	-	—
tanks, works lb.	.25¼	-	—
Diethylene glycol monomethyl ether, dms., c.l., dlvd lb.	.21	-	—
dms., l.c.l., dlvd lb.	.22½	-	—
tanks, dlvd. E lb.	.18½	-	—
Diethylenetriamine, dms., c.l., dlvd. E lb.	.44	-	—
dms., l.c.l., dlvd. E lb.	.45½	-	—
tanks, dlvd. E lb.	.41½	-	—
Diethylstilbestrol, USP, bots., 10-kilo lots kilo.	100.00		147.50
bots., 1-kilo lot kilo.	110.00		152.50
Digitalis leaves, USP, dom., dms. lb.	1.25	-	—
Digitoxin, USP, bots gram.	4.20	-	—
Diglycol laurate, dms lb.	.32¾	-	.34
Diglycol stearate, dms., ton lots lb.	.26	-	.28
Diglycolic acid, bgs., c.l., t.l., works, lb.	.15½	-	—
bgs., l.c.l., works lb.	.16	-	—
Dihexyl sebacate, dms., c.l., works, lb.	.66	-	—
dms., l.c.l., works lb.	.67	-	—
tanks, works lb.	.64	-	—
Dihydrazine sulfate, dms., works lb.	1.10	-	1.25
Dihydrostreptomycin hydrochloride, bulk gram	.04	-	.041

Eastman Plasticizers

Dimethyl phthalate
Diethyl phthalate
Di-(methoxyethyl) phthalate
Di-isobutyl phthalate
Dibutyl phthalate
Di-isooctyl phthalate (DIOP)
Dioctyl phthalate (DOP)
Dioctyl adipate (DOA)
Dioctyl azelate (DOZ)
Plasticizer 84
an octyl butyl phthalate
Polymeric Plasticizer NP-10
Triacetin
Tributyrin



For properties and shipping information on these and other Eastman products, see **Chemical Materials Catalog**, page 395 or **Chemical Week Buyers Guide**, page 97.

For highest quality finished products, rely on Eastman plasticizers. They are manufactured under the most exacting and rigid specifications. For further information write for a copy of "Eastman Plasticizers" or call the sales office nearest you.

Eastman CHEMICAL PRODUCTS, INC.

KINGSPORT, TENNESSEE, subsidiary of EASTMAN KODAK COMPANY

SALES OFFICES: Eastman Chemical Products, Inc., Kingsport, Tennessee; Atlanta; Chicago; Cincinnati; Cleveland; Framingham, Massachusetts; Greensboro, N. C.; New York City; St. Louis; Houston. **West Coast: Wilson Meyer Co.,** San Francisco; Los Angeles; Portland; Salt Lake City; Seattle.

Dihydrostreptomycin sulfate, bulk, gram	.04	•	.041
1,3-Dihydroxy anthraquinone, dms., works lb.	3.45	•	—
2,2-Dihydroxy-5-5-dichloro-diphenyl-methane, pure, dms lb.	2.53	•	—
tech., dms., 20,000 lbs. or more lb.	1.11	•	—
dms., 1,050 lbs. to 20,000 lbs. lb.	1.13	•	—
dms., 150 lbs. to 1,050 lbs lb.	1.13	•	—
Di-isobutyl ketone, dms., c.l., dlvd. lb.	.17	•	—
dms., l.c.l., dlvd lb.	.18½	•	—
tanks, dlvd. lb.	.14½	•	—
Di-isobutyl phthalate, dms., c.l., dlvd. E lb.	.31½	•	—
dms., l.c.l., same basis lb.	.32½	•	—
tanks same basis lb.	.29	•	—
Di-isobutylene dms., c.l. dlvd. E lb.	.10	•	—
dms., l.c.l., dlvd. E lb.	.11½	•	—
tanks, dlvd. E lb.	.08	•	—
Di-iso-octyl phthalate, dms., c.l., dlvd lb.	.27½	•	—
dms., l.c.l. same basis lb.	.29	•	—
tanktrucks, 1,000-1,999 gals., dlvd. lb.	.25½	•	—
tankcars, tanktrucks, 2,000 gals., dlvd lb.	.25	•	—
Di-iso-octyl sebacate, dms., c.l., works lb.	.62	•	—
dms., l.c.l., works lb.	.62½	•	.63
tanks, works lb.	.60	•	—
Di-isopropanolamine dms. c.l. dlvd. lb.	.23¼	•	—
dms., l.c.l. same basis lb.	.24¾	•	—
tanks, same basis lb.	.20¾	•	—
Di-isopropylamine dms., c.l., dlvd. E of Rockies lb.	.50½	•	—
dms., l.c.l., same basis lb.	.52	•	—
tanks, same basis lb.	.48	•	—
Dillweed oil, dom., bots., dms lb.	3.00	•	4.00
Dimethyl anthranilate, cns lb.	4.15	•	—
Dimethyl dichlorovinyl phosphate, 55 gal. dms., dlvd lb.	3.50	•	—
Dimethyl ethanolamines, anhyd., dms. c.l. dlvd lb.	1.225	•	—
dms., l.c.l. dlvd. lb.	1.235	•	—
tanks, dlvd. lb.	1.20	•	—
70% dms. c.l., dlvd., 100% basis, contained amines lb.	.68½	•	—
dms., l.c.l. dlvd. 100% basis lb.	.69½	•	—
tanks, dlvd. 100% basis lb.	.66	•	—
Dimethyl hydroquinone, dms. lb.	1.90		2.20
Dimethyl phthalate dms., c.l., works lb.	.27½	•	—
dms., l.c.l., works lb.	.29	•	—
tanktrucks, 1,000-1,999 gals., same basis lb.	.25½	•	—
tankcars, tanktrucks, 2,000 gals., same basis lb.	.25		—
Dimethyl sebacate dms. c.l., works. lb.	1.31	•	—
dms., l.c.l., works lb.	1.30	•	—
tanks, works lb.	1.23	•	—
Dimethyl sulfate, ref. dms., c.l., works lb.	.17½	•	—
ref. dms. l.c.l., works lb.	.18½	•	—
tanks, works lb.	.16½	•	—
Dimethyl sulfide dms. c.l. works. lb.	.16½	•	—
dms., l.c.l. works lb.	.17	•	—
tanks, works lb.	.15	•	—
Dimethylamine 25% soln., dms., c.l., frt. equald, 100% basis lb.	.38	•	—
dms. l.c.l., frt. equald, 100% basis lb.	.38½	•	—
tanks, frt. equald, 100% basis lb.	.28	•	—
40% soln., dms., c.l., frt. equald, 100% basis lb.	.35	•	—
dms. l.c.l. frt. equald, 100% basis lb.	.35½	•	—
tanks, frt. equald 100% basis, lb.	.28	•	—
N,N-Dimethylaniline dms. c.l. frt. alld lb.	.23	•	—
dms., l.c.l., same basis lb.	.29	•	—
tanks, same basis lb.	.26	•	—
N-N-Dimethylformamide, dms., c.l., t.l., works lb.	.32½	•	—
dms., l.c.l., works lb.	.33	•	.34
tanks, works lb.	.30	•	—
2,4-Dinitroaniline, dms. frt alld lb.	75	•	—
Dinitroaniline orange toner, CP, bbls dlvd E of Rockies lb.	1.56	•	—
Dinitroaniline orange toner prices 1c higher W of Rockies			
m-Dinitrobenzene, 89°C., dms lb.	.28	•	—
2,4-Dinitrochlorobenzene crystallizing at 46½°C. dms., c.l., frt. alld. E lb.	.17¼	•	—
dms., l.c.l., frt. alld. E lb.	.17¾	•	—
tanks, frt. alld. E lb.	.17	•	—
2,4-Dinitrophenol, bbls lb.	.41	•	—
2,4-Dinitrotoluene, oily dms. lb.	.11	•	—
Refd., 61°C., dms lb.	.23	•	—
Dioctyl adipate dms. c.l., works. lb.	.42½	•	—
dms., l.c.l. works lb.	.43½	•	—
tanks, works lb.	.40	•	—
Dioctyl phthalate dms., c.l., frt. alld lb.	.27½	•	—
dms. l.c.l., frt. alld lb.	.29	•	—
tanktrucks, 1,000-1,999 gals., same basis lb.	.25½	•	—
tankcars, tanktrucks, 2,000 gals., same basis lb.	.25		—
Dioctyl sebacate dms. c.l., works. lb.	.61¼	•	—
dms., l.c.l., works lb.	.62¼	•	—
tanks works dlvd. lb.	.59¼	•	—
1,4-Dioxane, dms. c.l. works lb.	.30	•	—
dms., l.c.l. works lb.	.30¾	•	—
tanks works lb.	.28	•	—
Dipentaerythritol, bgs., c.l., t.l., dlvd. E lb.	.40	•	—
bgs., l.c.l., t.l., dlvd E lb.	.41	•	—
Dipentene, dest.-dist. dms., c.l., works gal.	.59	•	—
dms. l.c.l. works gal.	.63	•	—
dms., l.c.l. ex whse. gal.	.79	•	—
tankcars works gal.	.42	•	—
Steam dist., dms., c.l., works, South gal.	.72	•	—
Dipentene, steam, dms., l.c.l., dlvd. New York gal.	.91	•	—
tanks, works, South gal.	.55	•	—
Dip oil (see Tar acid oil)			
Diphenolic acid, 1,000-lb. or more, bgs., works lb.	.75	•	—
Diphenolic polyether acids, 1,000-lb. or more, bgs., works lb.	1.00	•	—
Diphenyl, bgs., c.l., t.l., works lb.	.17¼	•	—
bgs., l.c.l., works lb.	.19	•	—
tanks, works lb.	.16	•	—
Diphenyl oxide, perfume grade, cns. lb.	.55	•	.70
Diphenyl phthalate dms., c.l., works. lb.	.51¾	•	—
dms., l.c.l. works lb.	.53¾	•	—
Diphenylamine, refd., flake, bgs., c.l., works, frt. equald lb.	.31	•	—
bgs., l.c.l., same basis lb.	.33	•	—
Refd., fused, tanks, same basis lb.	.28	•	—
same basis lb.	.28	•	—
Refd. diphenylamine in dms ½c. per lb. higher.			
Diphenylguanidine, bgs., dms., ton, tots, frt. alld lb.	.49	•	—
bgs., smaller tots, frt. alld. lb.	.50	•	—
Diphenylhydantoin-sodium USP dms. lb.	5.00	•	5.60
Dipropylene glycol, dms., c.l., frt. alld. lb.	.17	•	—
dms., l.c.l., frt. alld lb.	.18¼	•	—
tanks, frt. alld. lb.	.14¼	•	—

Dipropylene glycol methyl ether, dms., c.l., dlvd. E lb.	.30	•	—
dms., l.c.l., same basis lb.	.21½	•	—
tanks, same basis lb.	.18½	•	—
Dithiodibenzoic acid, dms., 1,000-lb. lots, works lb.	1.43	•	—
Di-o-tolylguanidine, dms., ton lots, frt. alld lb.	.69	•	—
dms., smaller lots, frt. alld. lb.	.70	•	—
Di-o-tolylthiourea, tech., solid, dms., c.l., t.l., frt. alld. lb.	.53	•	—
Divinylbenzene, 20-25%, dms., c.l., works, frt. equald lb.	.20	•	—
dms., l.c.l., same basis lb.	.21	•	—
tanks, same basis lb.	.19	•	—
50-60%, dms., c.l., works, 100% basis lb.	1.00	•	—
dms., l.c.l., works, 100% basis lb.	1.05	•	—
Dodecenyl succinic anhydride, dms., c.l., t.l., dlvd. E lb.	.73	•	—
dms., l.c.l., l.t.l., same basis lb.	.76	•	—
Dodecylbenzene, dms., c.l., t.o.b., works, frt. equald lb.	.134	•	—
dms., l.c.l., same basis lb.	.144	•	—
tanks, same basis lb.	.11	•	—
Dodecylphenol, c.l., frt. alld. lb.	.22	•	—
dms., l.c.l., same basis lb.	.23	•	—
tanks, same basis lb.	.19½	•	—
Dodecylphenol prices on shipments to Western States are 2c. per pound higher.			

Dyes, coaltar, certified colors for food, drugs and cosmetics, 500-lb. and 1-lb. lots, dlvd:

Violet, FD&C, No. 1 lb.	15.63		-17.60
Yellow, FD&C, No. 1 lb.	9.15		-11.05
No. 5 lb.	3.30		4.10
No. 6 lb.	3.30		4.10

Dyes, coaltar, certified colors for drugs and cosmetics, 200 lb. and 1 lb. lots, dlvd:—

Black, D&C, No. 1 lb.	10.50		-10.95
Brown, D&C, No. 1 lb.	15.65		-16.10
Green, D&C, No. 5 lb.	15.65		-16.10
No. 6 lb.	13.65		-16.10
No. 7 lb.	14.35		-14.80
Orange, D&C, No. 3 lb.	10.50		-10.95
No. 4 lb.	19.60		-20.05
No. 5 lb.	3.80		4.25
Red, D&C, No. 17 lb.	10.50		-10.95
No. 18 lb.	23.60		-24.00
No. 19 lb.	15.00		-15.45
No. 21 lb.	3.90		4.35
No. 22 lb.	10.50		-10.95
No. 28 lb.	24.15		-24.65
No. 33 lb.	17.00		-17.45
Violet, D&C, No. 2 lb.	15.65		-16.10
Yellow, D&C, No. 7 lb.	10.50		-10.95
No. 8 lb.	10.50		-10.95
No. 10 lb.	13.05		-13.50
No. 11 lb.	13.05		-13.50

Dyes, coaltar, certified colors for drugs and cosmetics, external use, 500-lb. and 1-lb. lots dlvd:—

Blue, Ext., D&C, No. 1 lb.	15.63		-16.10
Green, Ext., D&C, No. 1 lb.	15.65		-16.10
Red., Ext., D&C, No. 1 lb.	13.05		-13.50
Yellow, Ext., D&C, No. 1 lb.	10.50		-10.93

Dyes, coaltar for general use in cloth dyeing (numbers are those of the Colour Index scale or prototype), contract dlvd. No.

11110	Brilliant scarlet BN lb.	1.70	•	—
13390	Fast blue SR lb.	1.39	•	—
14025	Yellow 2G lb.	1.18	•	—
14030	Orange R, extra, conc. lb.	1.52	•	—
14645	Chrome black T lb.	.73	•	—
14720	Rubine XX, conc. lb.	1.47	•	—
15510	Orange Y, extra conc. lb.	.79	•	—
15575	Orange RR lb.	.94	•	—
15620	Fast Red A, conc. lb.	1.53	•	—
15705	Chrome blue black R, conc. lb.	1.07	•	—
16150	Scarlet 2RL lb.	1.16	•	—
16230	Fast light, orange 2G lb.	1.39	•	—
16255	Brilliant scarlet 3RN, conc. lb.	1.20	•	—
17390	Brown PG lb.	3.00	•	—
18050	Phloxine 2G lb.	1.05	•	—
18055	Fuchsine 6B lb.	1.55	•	—
18965	Fast Yellow 2G lb.	2.32	•	—
19140	Yellow XX lb.	2.30	•	—
19555	Yellow NN, conc. lb.	3.67	•	—
20170	Brown Y lb.	1.27	•	—
20470	Blue black, extra, conc lb.	1.37	•	—
21010	Brown, RX conc. lb.	1.35	•	—
22240	Scarlet B lb.	2.60	•	—
22310	Red FC lb.	1.45	•	—
22311	Brown MCW lb.	1.40	•	—
22590	Diazo black BHD lb.	.93	•	—
22610	Blue 2B extra conc. lb.	1.53	•	—
23500	Red, 4BX, conc lb.	1.80	•	—
24410	Sky blue FF, extra, conc. lb.	1.93	•	—
24895	Brilliant yellow conc. lb.	3.11	•	—

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Dyes, coaltar for general use in cloth dyeing (numbers are those of the Colour Index scale or prototype) contract dlvd No
- 26400 Navy blue 3R conc lb 1.70
- 26695 Black F conc lb 2.19
- 27900 Milling Red 3R conc lb 1.91
- 27075 Neutral black 2B conc lb 2.75
- 27720 Gray L lb 2.08
- 29185 Fast scarlet 4BNC lb 2.12
- 30015 Diazo black VJ conc lb 2.43
- 30235 Black EB, 200% lb 1.33
- 30045 Yellow brown K extra lb 1.26
- 30295 Green BY conc lb 1.02
- 35660 Brown B lb 2.89
- 37565 Naphthol SWF lb 1.76
- 40000 Yellow 2G lb 1.31
- 41000 Yellow OX lb 2.45
- 42000 Green V crystals lb 2.73
- 42040 Brilliant green G crystals lb 3.62
- 42090 Blue EG lb 1.85
- 42100 Milling green 6B conc lb 4.78
- 42640 Violet 4BXN lb 2.25
- 43820 Brilliant blue BBG lb 2.44
- 43045 Blue B extra conc lb 3.61
- 45170 Red BX lb 4.76
- 50415 Nigrosine SSJ lb 1.03
- 52015 Blue GXX lb 2.22
- 53185 Black GXCF conc lb 38
- 53005 Alizarin red SC lb 3.31
- 59700 Golden orange GFD single paste lb 2.70
- 59710 Flaming orange 6RD double powder lb 4.90
- 59800 Dark blue BO single paste lb 2.20
- 59825 Jade green NC supra double paste lb 1.50
- 61570 Alizarin green CG extra lb 3.53
- 63010 Alizarin blue SAPG lb 3.78
- 63615 Alizarin blue black B lb 3.02
- 69825 Blue BLFD double paste lb 2.82
- 70800 Brown BR single paste lb 2.03

Dyes coaltar, oil-soluble, 100 lb drums dlvd No
- 12140 Oil scarlet BL lb 1.70
- 12055 Oil orange 7078 V lb 5.87
- 26120 Oil red N-1700 lb 1.76
- 42535B Methyl violet base lb 1.88
- 44045B Victoria blue base lb 4.06
- 50415B Oil black 8603 lb 80
- 61565 Alizarin cyanine green base lb 6.13
- Spirit black RB lb 3.89
- Spirit brown GN lb 5.30
- Spirit orange R conc lb 5.87
- Spirit red B conc lb 6.41
- Spirit yellow 2R conc lb 4.62
- 12055 Spirit orange 7078 V lb 1.25
- Spirit blue THN lb 5.06

E

- **Echinacea root**, bls lb 1.25
- **Elm bark grinding**, bls lb 30 .32
- Powd., bbls., bxs lb .50 .55
- Select bundles lb 75 —
- **Emetine hydrochloride USP** bots oz 40 40 —
- **Endrin**, tech., dms., 100-lbs. or more, 100% basis, dlvd lb 2.70
- **Eosin red toner** bbls works lb 1.85 —
- **Ephedrine** syn., USP anhyd., bots 100-oz lots oz 98 1.00
- hydrous bots 100 oz lots oz 92 —
- **Ephedrine hydrochloride**, NF, dms., 100-oz., f.o.b. works oz. .72
- **Ephedrine sulfate**, USP, cryst., dms., 100-oz., f.o.b. works oz. .73
- USP, powd., dms., 100-oz., same basis oz. .73
- **Epichlorohydrin** dms., c.l., dlvd lb. .29½- —
- dms., l.c.l., dlvd lb. .31 —
- tanks, dlvd. lb. .27 —
- **Epsom salt** (see Magnesium sulfate)
- **l-Epinephrine base** syn USP bots 100 gram lots gram .58 —
- **Erigeron oil** cns lb 11 00 —
- **Ergot**, NF, dms., tin-lined lb. 1.00 1.25
- **Eserine salicylate**, bots oz. 44.00 —
- **Eserine sulfate**, bots oz 86 00 —
- **Ester gum**, gum rosin type, dms., c.l., dlvd., Ill., Md., Ky., E States Minneapolis N C., Ohio St Louis St Paul, Va., W. Va lb. .18½- —
- Wood-rosin type, dms., c.l., same basis lb. .18½- —
- **Ether** (see specific product)
- **Ethyl acetate** nat ferment 85-88%, dms c.l. dlvd lb .15
- dms., l.c.l., dlvd lb .16½ —
- tanks dlvd lb .12½ —
- 95-98% dms., c.l., dlvd lb .15¼- —
- dms., l.c.l., dlvd lb .16¾ —
- tanks dlvd lb .12¾ —
- 99% dms. c.l., dlvd. lb .15½ —
- dms. l.c.l. dlvd lb .17 —
- tanks dlvd lb .13 —
- Syn., 85-88%, dms., c.l., dlvd lb. .15 —
- dms., l.c.l., dlvd lb .16½ —
- tanks dlvd lb .12½ —
- 95-98% dms., c.l., dlvd lb. .15¼- —
- dms., l.c.l., dlvd lb .16¾ —
- tanks, dlvd lb .12¾ —
- 99% dms. c.l., dlvd. lb .15½ —
- dms., l.c.l., dlvd. lb .17 —
- tanks dlvd lb .13 —
- **Ethyl acetoacetate** dms., c.l., dlvd lb .58½ —
- dms., l.c.l., dlvd. lb .60 —
- tanks dlvd lb .56 —
- **Ethyl acrylate** dms., c.l., t.l., dlvd lb .36 —
- dms., t.t.l., dlvd. lb .37 —
- tanks dlvd lb .34 —
- **Ethyl alcohol**, 190 pf., USP, tax paid dms. c.l. dlvd E of Rockies gal 20.63 —
- dms., t.c.l. same basis gal 20.68 20.74
- **Ethyl alcohol**, 190 pf., USP, tax-free, dms., c.l., dlvd E of Rockies gal .68 —
- dms., t.c.l same basis gal .73 .79
- tanks same basis gal .52 —
- **Ethyl alcohol**, absolute 200 pf., tax paid dms dlvd E of Rockies gal 21.75 —
- dms., t.c.l., same basis gal 21.80 21.86
- tanks same basis gal 21.59 —
- **Ethyl alcohol, denatured** (see Denatured alcohol, ethyl)
- **Ethyl aminobenzoate USP** (see Benzocaine).
- **Ethyl amyl ketone** dms., c.l., dlvd. lb .20 —
- dms., t.c.l. same basis lb .21½ —
- tanks same basis lb .17½ —
- **Ethyl benzoate**, bots lb. .75 1.00
- **Ethyl bromide** tech., 98%, dms., c.l., frt. alld E lb .43 —
- dms., t.c.l., frt. alld E lb .45 —
- tanks, frt. alld E. lb .41 —
- **Ethyl butyl ketone** dms., c.l., t.l., works lb .36 —
- dms. t.c.l., t.t.l. works lb .36¾ —
- tanks works lb .34 —
- **Ethyl butyrate**, dms., works lb. .85 1.00
- **Ethyl carbamate** (see Urethane).
- **Ethyl cellulose**, vis. 7 cps., bgs., 5,000-lb lots or more frt. alld E lb .73
- bgs., smaller lots, frt. alld E lb .75 —
- **Ethyl cellulose**, vis. to 20, 50, 100, 150 cps., bgs., 5,000-lb. lots or more frt alld E lb .68 —
- bgs., smaller lots, frt. alld E. lb. .70 —
- **Ethyl chloride**, tech. cyls., works lb .20 .22
- dms., works lb .18 .20
- tanks, works lb .10 —
- **Ethyl cinnamate** cns lb 3.35 3.50
- **Ethyl ethanolamines**, mixed, dms. c.l. dlvd E lb 43½- —
- dms., t.c.l. dlvd E lb 44½- —
- tanks dlvd E lb 41½- —
- **Ethyl ether absolute** ACS dms lb .27 —
- Anesthesia, USP, dealers, 1-lb. cns lb 1.01 —
- ½ lb cns lb 1.09 —
- ¼-lb cns lb 1 21 —
- Indust., dms., c.l., dlvd. lb. .13½- —
- dms., t.c.l., dlvd E lb .15 —
- tanks, dlvd E lb 11 —
- **2-Ethyl hexoic acid** dms. c.l., t.l., dlvd E lb .37 —
- dms., t.c.l., t.t.l. dlvd E lb 33½- —
- tanks dlvd E lb 34½- —
- **2-Ethyl hexoic acid** 1c higher W of Rockies
- **2-Ethylhexyl acrylate**, c.l. or t.l., straight or mixed frt. alld E lb. 42½- —
- dms., t.t.l. same basis lb 43½- —
- tanks, same basis lb 40 —
- Prices of 2-ethylhexyl acrylate are 1½c. per lb higher in Ariz., Calif. Idaho, Nev Ore. Utah and Wash
- **2-Ethylhexyl alcohol** dms c.l. dlvd. lb 23¾ —
- dms. t.c.l. dlvd lb .25¼- —
- tanks, dlvd lb .21¼- —
- **Ethyl iodide**, cbys., works lb 3.30 —
- **Ethyl methacrylate** dms., c.l., frt equald lb .52 —
- dms. t.t.l. frt equald lb 52½- —
- tanks, frt. equald lb 50 —
- **Ethyl morphine hydrochloride**, USP bots oz 11.85 —
- **Ethyl oenanthate**, dms lb. 1.05 1.30
- **Ethyl oxalate** (see Diethyl oxalate)
- **Ethyl silicate**, dist (see Tetraethyl orthosilicate)
- **Ethyl silicate**, 40% available, SiO_2 dms., c.l., dlvd lb 44½- —
- dms., t.c.l. dlvd lb .46 —
- tanks, dlvd lb 42 —
- **N-Ethyl-α-naphthylamine** dms. works lb 1.02 —
- **N-Ethyl-m-toluidine** tech., liq., tanks frt alld lb .83 —
- **N-Ethyl-o-toluidide**, bbls lb 88 —
- **Ethylamine** (see Mono- Di- or Tri-)
- **N-Ethylaniline** dms. c.l., frt alld lb .57 —
- dms., t.c.l., frt alld. lb .58 —
- tanks, frt. alld. lb .55 —
- **Ethylbenzene** 99% dms. c.l. or t.l., frt. equald lb .15 —
- dms., t.c.l. same basis lb. .17 —
- tanks, same basis lb .12½- —
- **2-Ethylbutyl alcohol**, dms., c.l., works lb .30 —
- dms., t.c.l., works lb .30¾- —
- tanks, works lb. .28 —
- **Ethylene**, contract, ref'y gate lb 0475- 0525
- **Ethylene dibromide** dms., c.l., frt. equald lb .30½ —
- dms., t.c.l frt equald lb .31½- —
- tanks, frt equald lb 28½- —
- **Ethylene dichloride** dms. c.l., dlvd. lb 11½- —
- dms., t.c.l., same basis lb. .13 —
- tanks, same basis lb .09 —
- **Ethylene dichloride** prices W of Rockies, 1c. per lb higher.
- **Ethylene glycol**, indust., dms., c.l., dlvd E lb .16 —
- dms., t.c.l., same basis lb. .17½- —
- tanks, same basis lb. .13½ —
- **Ethylene glycol monobutyl ether**, dms. c.l., dlvd E lb .22 —
- dms., t.c.l., dlvd E lb .23½- —
- tanks, dlvd E. lb .19½- —
- **Ethylene glycol monoethyl ether**, dms., c.l., dlvd E lb .21 —
- dms., t.c.l., dlvd E lb .22½- —
- tanks, dlvd E lb 18½ —
- **Ethylene glycol monoethyl ether acetate** dms, c.l. dlvd E lb 19½ —
- dms., t.c.l., dlvd E lb .20½ —
- tanks dlvd. E lb 17 —
- **Ethylene glycol monomethyl ether**, dms., c.l., dlvd E lb .21 —
- dms., t.c.l., dlvd E lb .22½- —
- tanks, dlvd E lb 18½ —
- **Ethylene glycol monomethyl ether acetate** dms., c.l. dlvd E lb .28 —
- dms., t.c.l., dlvd E lb 29¾- —
- tanks, dlvd E. lb .27 —
- **Ethylene glycol monostearate**, triple pressed, dms lb .33 .35
- **Ethylene oxide** dms c.l., dlvd E. lb .21½- —
- dms., t.c.l., dlvd E. lb 24½- —
- tanks dlvd E. lb. 15½- —
- **Ethylene trichloride** (see Trichloroethylene)
- **Ethylenediamine**, 85-88%, dms., c.l., dlvd E., 100% basis lb. 42 —
- dms. t.c.l. dlvd E. 100% basis. lb. 43 —
- tanks, dlvd. E., 100% basis lb .40 —
- **Ethylvanillin**, 100 lb. fib dms., 500-lb lots and over lb 6.75 —
- **Eucalyptol**, USP, cns., dms lb. .85 1.40
- **Eucalyptus oil** NF rectified 70-75%, dms lb. .50 .58
- NF, rectified, 80-85%, dms. lb. .58 .85
- **Eugenol**, tech., dms. lb 1.45 —
- USP, dms. lb. 2.10 2.80
- **Euphorbia** herb, bls lb. .12 .15

F

- **F salt**, paste, tech., dms. works lb 2.30 —
- **Feldspar** 140-200 mesh bulk, c.l., works ton 19.50 —
- Feldspar in bags $5 per ton higher
- **Fennel oil**, sweet, USP, cns. lb. 2.25 2.70
- **Fennel seed**, Argentine bgs. lb. .14 —
- French light bgs lb .20 —
- Indian, light, bgs. lb. .17 —
- Rumanian bgs lb .14 —
- Yugoslav, light, bgs lb. .16½- —
- **Fenugreek seed** Moroccan bgs lb. 07½- —
- **Ferric chloride** annyd. tech., dms., c.l., works 100 lbs 7.50 —
- dms t.c.l. works 100 lbs 8.50 —
- **Indust., cryst., ons., c.l., works**, 100 lbs 5.25 6.75
- **Ferric chloride**, indust., cryst., bbls. c.l., works 100 lbs 5.75 7.25
- 42° Be., photo grade, cbys., c.l., works 100 lbs. 7.25 8.25
- sewage grade, tanks, frt equald 100% basis 100 lbs 4.00 —
- USP, cryst., dms., t.l., works lb. .08½- —
- **Ferric citrate**, gran. dms. lb .86 —
- **Ferric hypophosphite** NF dms lb 3.45 —
- **Ferric naphthenate**, liq., 6% Fe, dms., frt alld lb. .26¼- —
- **Ferric oxalate**, tech., gran., 50-lb. dm. f.o.b works E lb. .89 —
- **Ferric oxides** (see iron oxides).
- **Ferric phosphate**, NF, soluble gran pearls, cs lb. 72 .75
- **Ferric pyrophosphate**, NF VII, soluble, gran. pearls, dms lb. .33 —
- **Ferric resinate** 6¾% Fe, dms., ton. lots, frt. alld lb. .40¼- —
- **Ferric stearate** dms. c.l. frt alld. lb .29 —
- dms. t.c.l., frt. alld. lb. .40 .44
- **Ferric sulfate** partly hydrated, bgs., c.l works ton 35.25 —
- bgs. t.c.l. works ton 36.25 42.25
- bulk, c.l., works ton 33.25 —
- **Ferric ammonium citrate**, brown, pearls, NF, gran., dms lb. .65 .68
- Green pearls, USP XII, gran., dms lb .66 .69
- **Ferric-ammonium oxalate** fine gran., dms lb. 27½ .29½
- **Ferric-potassium oxalate** fine gran., dms lb .32½ .34½
- **Ferric-sodium oxalate**, fine gran., dms lb. 27½ .29½
- **Ferrous gluconate** USP 200-lb. dm., frt. equald lb. 96 —
- **Ferrous sulfate** gran. bgs., c.l., works ton 34.50 —
- bgs. t.c.l., dlvd Metropolitan area, 100 lbs 3.35 4.25
- bbls. c.l., works ton 40.00 —
- bulk, c.l., works ton 27.00 —
- USP cryst. bbls. dms. lb 09½ 10
- **Fir balsam** Canada bbls. gal. 32.00 35.00
- Oregon, bbls. gal. 3.40 4.64
- **Fir oil**, Canada, cns lb. 1.75 2.50
- **Fish oil**, refd., alkali, dms lb. .1300- .1350
- Kettle-bodied, dms. lb. .1530- .1580
- Light-pressed, dms. lb. .1150- .1200
- tanks lb .10 —
- **Fishliver oil**, high potency, 100,000 A units per gram, dms. 1,000,000 units. .16 —
- 200,000 A units per gram, dms. 1,000,000 units .17½- —
- 500,000 A units per gram, dms., 1,000,000 units. .18 —
- **Fishmeal**, dom., menhaden, 60% protein, grd., bgs., Atlantic coast ton. 110.00 —
- **Fishscrap**, dom., menhaden, dried, 60% protein grd., bgs., Atlantic coast ton. 106.00 —
- **Fleaseed** (see Psyllium seed).
- **Folic acid** USP, bots. fib dms., kilo lots or more gram .30 .44
- 10% feed grade fib dms., 3 kilos or more kilo. 30.00 44.00
- **Formaldehyde**, 37%, (inhibited 7 to 8% methanol), USP, dms, c.l. dlvd lb. .0670- —
- tanks, dlvd lb. .0405- —
- **Formaldehyde**, 37% (inhibited 12 to 15% methanol), USP, dms., c.l., dlvd. lb. .0695- —
- tanks, dlvd lb. .0430- —
- **Formaldehyde**, methanol-free (uninhibited) tanks, dlvd lb. .0375- —
- **Formic acid** 85% cbys. c.l., works. lb. .1570- —
- cbys. t.c.l., works lb. .1620- .1720
- 90%, cbys., c.l., works lb. .1625 —
- cbys. t.c.l works lb .1675 .1775
- **Fringetree bark**, bls lb. .65 .70
- **Fuller's earth** bgs. c.l. ill mines, ton 19.00 —
- Calcined, bgs., c.l., same basis, ton 20.00 21.75
- Insecticide grade, dried, powd., bgs., c.l., Ga. or Fla. mines, ton 17.50 —
- **Fuller's earth**, oil-bleaching grade, 100-mesh, bgs., c.l., same basis, ton 16.30 17.00
- 200-mesh bgs. c.l., same basis, ton 17.50 18.00
- Spent, bgs. c.l., ship't point ton 4.50 5.00
- **Fumaric acid**, tech., 250-lb. dms., c.l., frt. equald lb. .22¾- —
- dms., l.c.l., frt. equald. lb. .24¼- —
- **Furfural**, dms., c.l., works lb. .13 —
- dms., l.c.l., works lb. .14 —
- tanks, dlvd E. lb. .12 —
- tanks, dlvd W lb .13 —
- **Furfuryl alcohol**, cns., works lb. .28 —
- cns., l.c.l., Memphis, Tenn lb. .20 —
- tanks, Memphis, Tenn lb. .175 —
- dms., c.l., t.l., Newark, N. J lb. .20½- —
- c.l., t.l., dms., Memphis lb. .19 —
- dms., l.c.l., t.l.l., Newark, N. J lb. .21½- —
- l.c.l., t.l.l., dms., Memphis lb. .20 —
- **Fusel oil**, refd., dms., c.l., dlvd lb .18 —
- dms., l.c.l., dlvd lb .19½- —
- tanks dlvd. lb. .15½- —

G

- **G salt** bbls. frt alld., 100% basis lb. 73 —
- **Gallic acid** NF VII bbls. 1,000 lb. lots lb 2.00 —
- bbls. smaller lots lb 2.02 2.22
- Tech., bbls., 1,000-lb. lots lb 1.78 —
- bbls. smaller lots lb 1.80 2.00
- **Gamma acid**, dry grd., bbls., frt. alld lb. 1.75 —
- **Gammapicoline** (see g-picoline).
- **Garlic oil**, dom bots oz. 4.75 6.05
- Imp. bots oz. 4.50 5.00
- **Gaultheria oil** (see Wintergreen oil).
- **Gelatin**, edible, 75 AOAC test, bbls., c.l., dlvd lb. .55 —
- 150 AOAC test, bbls., c.l., dlvd. lb. .64 —
- 200 AOAC test, bbls., c.l., dlvd. lb. .70 —
- 225 AOAC test, bbls., c.l., dlvd. lb. .74 —
- 275 AOAC test, bbls., c.l., dlvd. lb. .82 —
- **Gelsemium root**, bls lb. .30 .35
- **Gentian root** bls lb. .24 —
- Grd., bbls., bxs lb. .30 —
- Powd., bbls., bxs lb. .30 —
- **Geraniol** extra, cns, dms lb 2.00 3.65
- Soap grade, dms lb. 1.05 1.30
- Standard cns, dms lb 2.00 3.40
- **Geranium oil**, Algerian, cns lb. 19.00 —
- Bourbon, cns. lb. No offerings
- **Geranium oil**, Turkish (see Palmarosa oil)
- **Geranyl acetate**, cns lb 1.90 2.70
- **Ginger oil**, dist. nats lb. 10.50 14.00
- **Ginger oleoresin** NF from African root, bots lb. 4.25 5.00
- NF, from Jamaican root, bots. lb. 7.75 —
- **Ginger root**, Cochin, bgs. lb .27 —
- Jamaican No 3, bgs lb .32 —
- Nigerian, split, bgs. lb. .16 —
- Sierra Leone, bgs. lb. .29 —
- **Glauber's salt** (see Sodium sulfate).
- **Gluconic acid** tech., 50% dms., c.l., t.l. frt. alld lb. .18 —
- dms t.c.l. frt alld lb. .20½- —
- tanks frt alld lb. .13½- —
- **Glue**, bone, extracted, dry bone, 86 jellygrams bgs c.l. dlvd. lb. .16 —
- 131 jellygrams, bgs., c.l., same basis lb. .16½- —
- 164 jellygrams, bgs., c.l., same basis lb. .18½- —
- 191 jellygrams, bgs. c.l., same basis lb. .19½- —
- 222 jellygrams bgs. c.l., same basis lb. .21 —
- **Glue**, bone, green, 40 jellygrams, bgs., c.l., same basis lb. .16- —
- 86 jellygrams bgs. c.l. same basis lb .16 —
- 115 jellygrams bgs., c.l., same basis lb. .16½- —
- 135 jellygrams, bgs. c.l., same basis lb. .17½- —
- 164 jellygrams, bgs. c.l., same basis lb. .18½ —
- 180 jellygrams, bgs. c.l., same basis lb. .19½ —
- 200 jellygrams, bgs. c.l., same basis lb. .20½- —
- Bone glue 1c prices 2c higher.
- **Glue** hide 70-94 jellygrams, bgs., c.l., dlvd lb. .20 —
- 95-121, bgs., c.l., dlvd lb. .21½- —
- 122-149, bgs., c.l., dlvd lb. .23 —
- 150-177, bgs., c.l., dlvd lb. .24½- —
- 178-205, bgs., c.l., dlvd lb. .26 —
- 207-236, bgs., c.l., dlvd lb. .28½- —
- 237-266, bgs., c.l., dlvd lb. .30½- —
- 267-298, bgs., c.l., dlvd lb. .32½- —
- 299-330 jellygrams, bgs., c.l., dlvd lb. .34½- —
- 331-362, bgs., c.l., dlvd lb. .36½- —
- 363-394, bgs., c.l., dlvd. lb. .38 —
- 395-427, bgs., c.l., dlvd lb. .40 —
- 428-460, bgs., c.l., dlvd lb. .42 —
- 461-494 bgs., c.l., dlvd lb. .44 —
- 495-529, bgs., c.l., dlvd lb. .46 —
- Hide glue 1c prices 2c higher
- **l-Glutamic acid**, 99½% fib dms., 100-lb lots, frt alld lb 1.80 —
- fib dms., 25-lb lots, frt. alld. lb 1.88 —
- **l-Glutamine**, bots. 1-9 kilo lots, kilo. 150.00 300.00
- Bots., 50-kilo lots kilo. 100.00 —
- Bots., 500-kilo lots kilo. 75.00 —
- **Glycerine** dom. nat. crude saponification, 88%, tanks, dlvd lb. .21½- .21¾
- nat. crude soapive 80% tanks, dlvd lb. .19 .19¼
- **Nat., refd., USP CP**, 99%, dms., c.l., dlvd lb. .30¾- —
- dms., l.c.l., dlvd lb. .31¾- —
- tanks, dlvd. lb. .29¼- —
- **Nat., refd., USP, CP**, 96%, dms., c.l., dlvd lb. .30 —
- dms., l.c.l., dlvd lb. .30¾- —
- tanks, dlvd. lb. .28¼- —
- **Nat., high gravity**, dms., c.l., dlvd. lb. .30¾- —
- dms., l.c.l., dlvd lb. .31¾- —
- tanks, dlvd lb. .29 —
- **Syn.**, dms., c.l., dlvd. lb. .31 —
- dms., l.c.l., dlvd. lb. .33¾- —
- tanks, dlvd. lb. .29¼- —
- **Imp. nat.**, crude, soaplye, 80%, c.i.f lb. .19 Nom.
- **Glycine** (see Aminoacetic acid)
- **Glycerol** (see Glycerine)
- **Glycolic acid** (see Hydroxyacetic acid).
- **Glycolonitrile**, 70% aqueous, dms., c.l., t.l., works lb. .29 —
- dms., l.c.l., same basis lb. .30 —
- tanks, same basis lb. .29 —
- **Glyoxal**, 30% dms. c.l. works lb .20½ —
- dms. t.c.l works lb. .21¼- —
- tanks works lb. .18 —
- **Golden seal root**, NF, tested, bls. lb. 2.75 3.25
- **Gramicidin** 1 to 5 kilos f.o.b works gram 4.70 —
- **Grapefruit oil**, dms. lb. 2.10 2.50
- **Graphite** amorp powd., bgs., fib dms., ex whse lb .06 .09¼
- cryst. 88-90% powd bgs fib dms ex whse lb. .19 .21¼
- cryst., 90-92% powd., bgs., fib dms., ex whse lb. .21 .24¼
- **Graphite**, powd., bgs., fib, dms., ex whse lb. .29 .31¼
- flake, No. 1, 90-95%, bgs., fib, dms., ex whse lb. .29 .31
- No. 2, 90-85% bgs., fib dms., ex whse lb. .29 .31
- **Grease white** choice all hog, tanks, dlvd lb. .06½- .06¾
- **Yellow**, tanks, dlvd lb. .05 —
- **Grease oil**, No. 1, dms., c.l lb. .13¾ Nom.
- dms., l.c.l. lb. .14¾ Nom.
- **Extra winter**, strained, dms. c.l. lb. .16¼ Nom.
- dms., l.c.l. .17¼ Nom.
- **Prime**, burning, dms., c.l. lb. .17¾ Nom.
- dms., l.c.l. lb. .18¾ Nom.

GREEN PIGMENTS
Green pigment quotations are listed individually. For example, prices on Green, chrome, may be found in the C's under Chrome green.

- **Grindelia robusta herb**, bls lb. .40 —
- **Guaiacol**, NF, cryst., dms., tins lb. 2.10 2.15
- NF liq. cbys. dms lb 2.30 2.40
- **Guaiacol carbonate** NF VII, dms lb 3.40 3.45
- **Guaiacwood oil** cns lb. .75 1.30
- **Guar gum**, food grade bgs., c.l lb. .38 —
- bgs., 5,000 lbs. or more lb. .39 —
- Indust., bgs. c.l. lb .32 —
- Tech grade bgs lb .30 .33

GUMS
Gum quotations are listed individually. For example, prices on Gum, Dammar, may be found in the D's under Dammar gum.

- **Gypsum**, plaster of Paris, 100-lb paper bgs., trucks, dlvd New York ton 20.30 —
- Terra alba dom., 100-lb paper bgs., trucks, same basis ton 20.00 —
- 100-lb paper bgs. trucks works, New York ton 17.00 —
- Terra alba, imp., English, 100-lb. paper bgs., l.c.l., ex dock, New York ton 55.00 —
- 100-lb paper bgs. ex whse ton 60.00 62.00

H

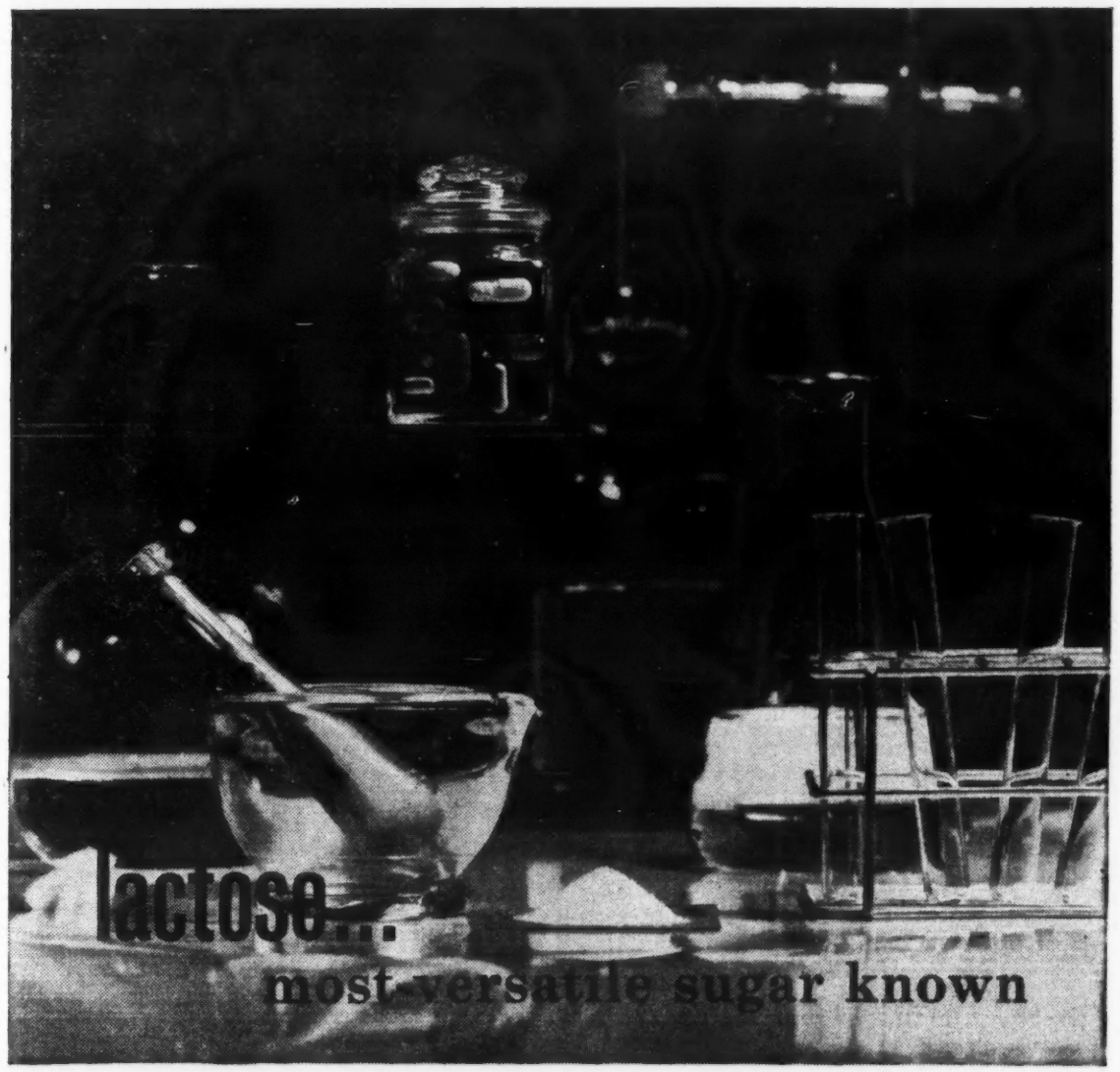
- **H acid**, dry bbls. c.l., frt. alld., 100% basis lb .90 —
- bbls., t.c.l. same basis lb .95 —
- **Hansa yellow 10 G**, bbls., dlvd E of Rockies lb 2.45 —
- **Hansa G yellow**, pigment bbls lb 2.20 —
- **Hawthorn berries**, bgs. lb .18 .20
- **Heliotropin**, 100-lb. lots, dms lb. 2.60 3.40
- **Hellebore root** dom. green bls lb .70 .75
- **Helonias root** bls lb 1.50 —
- **Hemlock oil**, cns lb. 2.55 3.00

Henbane leaves, bls.....lb. .45 - .50
Heptachlor, dms., c.l., t.l., frt. alld., 100% basis..lb. .98 - —
Heptane, industrial, tankcars, New Jersey and New York, gal. .20 - —
Houston, Texas .....gal. .1625- —
Hesperidin, purif., 100-lb. fib. dms., f.o.b., works lb. 6.95 - —
Hesperidin methylchalcone, bots., 50-lb. lots, works lb.22.50 - —
bots., 5-lb. lots, works..... lb.23.00 - —
bots., 1-lb lots, works..... lb.23.50 - —
Hexachloropnene, dms., 1,100 lbs., or more lb. 1.84 - —
dms., to 1,100 lbs..... lb. 1.94 - —
Hexalin (see Cyclohexanol).
Hexamethylenetetramine, tech. bgs., 20,000-lb. lots or more, Perth Amboy or New York City..lb. .233 - —
bgs., 1,000-19,999-lb. lots, same basis lb. .243 - —
bgs., smaller lots same basis.lb. .253 - —
fib. dms., 1,000-lb. lots or more, same basis lb. .250 - —
fib. dms., smaller lots, same basis lb. .233 - —
USP, bgs., 500 lbs or more, f.o.b. Fords, N. J., dlvd. New York City and Philadelphia, lb., .42½- —
bgs., smaller lots, same basis lb. .43½- .48½
Hexane, industrial, tankcars, New Jersey and New York, gal. .20 - —
Houston, Texas .....gal. .16 - —
1-Hexanol, dms., c.l., works .... lb. .35 - —
dms., t.c.l., works..... lb. .35¾- —
tanks, works ..... lb. .33 - —
Hexyl cinnamic aldehyde, dms lb. 4.00 - 7.50
n-Hexyl methacrylate, dms., c.l., works lb. .75½- —
dms, t.c.l., works ..... lb. .76 - —
Hexyl salicylate, dms. ..... lb. 1.75 - —
Hexylene glycol, dms., c.l., dlvd lb. .17½- —
dms., t.c.l., dlvd ..... lb. .19 - —
tanks, dlvd. ..... lb .15 - —
Hexylresorcinol, USP, dms., 25-lb. lots or more, dlvd lb.14.00 - —
dms., smaller lots, dlvd. .. lb.14.50 - —
Homatropine hydrobromide, USP, bots oz. 3.25 - —
Homatropine methylbromide, USP, bots oz. 3.25 - —
Hoofmeal, 17-18% ammonia, bulk, c.l., Chicago unit-ton 6.75 - —
Horehound herb, bls..... lb. .18 - .20
Hydrastis (see Goldenseal).
Hydrazine hydrate, 85% ret. dms., works lb. 1.35 - 1.55
100% ret. dms., works lb 1.60 - 1.90
Hydriodic acid, purif., 47%, 2-cbys., f.o.b. works lb. 2.92 - —
Hydroabietyl alcohol, tech., solid, dms., c.l., dlvd zone 1 lb. .29¼- —
dms., t.c.l., dlvd zone 1 lb. .29¾- .30¼
tanks dlvd zone 1 lb 27¼- —
Zone 1 for hydroabietyl alcohol comprises all of continental US except Ariz., Calif., Colo., Idaho, Mont., Nev., N. M., Ore., Utah, Wash., Wyo. and the western part of Texas.
Hydrobromic acid, medicinal, 48%, cbys. frt equald lb. .43 - .56
Hydrochloric acid, anhyd (see Hydrogen chloride)
Hydrochloric acid, 18°, cbys., c.l., works 100 lbs. 2.50 - —
cbys. t.c.l. dlvd. Metropolitan area 100 lbs. 2.90 - 3.05
tanks works frt. equald ton 28.00 - —
20°, cbys., c.l., works..100 lbs. 2.75 - —
cbys. t.c.l. dlvd Metropolitan area 100-lbs. 3.15 - —
tanks works frt equald .. ton 30.00 - —
Hydrochloric acid, 22°, cbys., c.l., works..100 lbs. 3.25 - —
cbys. t.c.l. dlvd Metropolitan area 100 lbs 3.65 - —
tanks works frt equald ton.35.00 - —
CP, USP, consumers cbys., extra, c.l., works lb. .15¾ - —
cbys. t.c.l. same basis lb. .17¼- .17¾
Hydrochloric acid, 5-pint bots., extra cs. c.l. same basis lb. .20¾- —
Hydrocortisone acetate bulk, bots., kilo lots or more..gram. 1.10 - 1.90
Hydrocortisone alcohol bulk, bots., kilo lots or more..gram. 1.10 - 1.90
Hydrocyanic acid, dilute, NF, 2%, 5-pt. bots., f.o.b. works..pt. .70 - —
Hydrofluoric acid, anhyd. (see Hydrogen fluoride)
Hydrofluoric acid, aqueous, 70%, 55-gal. dms., c.l., t.l., dlvd. 100 lbs.19.25 - —
55-gal. dms., t.c.l., t.t.l., dlvd. 100 lbs.20.75 - —
20-gal. dms., c.l., t.l., dlvd. 100 lbs.21.00 - —
20-gal. dms., t.c.l., t.t.l., dlvd. 100 lbs.22.50 - —
tanks, works, frt. equald. 100 lbs.15.50 - —
Delivered prices apply to all states east of Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Washington and Wyoming. In those states add $2.70 per cwt. for drum delivery.
Hydrofluosilicic acid, dms., works, 30% basis lb. .06 - —
Hydrofuramide, dms., fib. ctns., works lb. .30 - .40
50-lb. cyls., t.c.l., works ..... lb. .53 - .60
Hydroquinone, photo grade, dms., 50-lbs., f.o.b. works..lb. 1.10 - —
Tech., dms., c.l., dlvd. ..... lb. .82½- —
dms. t.c.l. dlvd lb. .84½- —
Hydroquinone, monomethyl ether, dms., t.l., dlvd. ..... lb. 2.59 - —
dms., t.t.l., dlvd. ..... lb. 2.61 - —
Hydrogen chloride, anhyd., 50-lb. cyls., t.c.l., works lb. .45 - —
Hydrogen cyanide, liq., 98%, tanks, works lb. .14 - —
Hydrogen fluoride, anhyd., cyls., dlvd. E lb. .30½- .32½
cyls. dlvd W. ..... lb. .39 - —
tanks, works ..... lb. .21 - —
Hydrogen peroxide 35%, dms., c.l., dlvd lb. .202 - —
dms., t.c.l., dlvd. ..... lb. .211 - —
tanks, dlvd ..... lb. .1800- —
Hydroxyacetic acid, tech., 70%, dms., Philadelphia and Chicago lb. .11 - —
tanks, Belle, W. Va. ..... lb. .073 - —
Hydroxycitronellol, cns. ..... lb. 3.75 - —
Hydroxyethyl cellulose, low viscosity grades, fib. dms., 20,000-lb.lots or more, f.o.b. shipping point, lb. .96 - —
fib. dms., 2,000 to 19,999-lb. lots, same basis lb. .99 - —
fib. dms., 150 to 1,999-lb. lots, same basis lb. 1.02 - —
fib. dms., less than 150-lb. lots, same basis..lb. 1.12 - —
Hydroxyethyl cellulose nigh viscosity grades, fib. dms., 20,000-lb. lots or more, f.o.b. shipping point lb. 1.01 - —
fib. dms., 2,000 to 19,999-lb. lots, same basis lb. 1.04 - —
fib., dms., 65 to 1,999-lb. lots, same basis lb. 1.07 - —
fib. dms., less than 65-lb. lots same basis..lb. 1.17 - —

Hyoscine salts (see Scopolamine)
Hyoscyamine hydrobromide, bots oz. 7.00 - —
Hyoscyamine sulfate, bots. .....oz. 7.00 - —
Hypophosphorous acid, purif., 50%, 10-cbys., f.o.b. works..lb. 1.93 - —
NF, 50%, 10-cbys., same basis..lb. 1.33 - —

I

Ichthammol, NF, dms. .....lb. .75 - 1.05
Indigo (see Dyes coaltar, 1171 indigo, syn).
Indole, CP, bots.....lb.14.75 -18.25
Inositol, bots., dlvd. .....lb. 5.00 - —
dms., dlvd. .....lb. 4.50 - 4.75
Insect flowers (see Pyrethrum).
Iodine, crude, kgs. ..... lb. .93 - —
Resub., USP, dms., f.o.b. works lb. 2.00 - 2.02
Iodochlorohydroquinolin, USP, dms. lb. 3.60 - —
Iodoform, NF, dms., 300-lbs., f.o.b. works..lb. 4.90 - —
dms., 100-lbs., same basis..... lb. 5.05 - —
a-Ionone, cns. .....lb. 4.60 - 5.75
b-Ionone, cns. .....lb. 4.15 - 6.15
Ipecac root, whole, bgs ..... lb 8.00 - 8.50
Powd., bbls., bxs. ..... lb 9.50 -10.00
Irish moss, bleached, prime, bls..lb. .20 - .23
Iron blue, alkali-resisting, bbls., c.l., dlvd. E lb. .57 - —
bbls., t.c.l. ton lots same basis. lb. .58 - —
bbls., smaller lots same basis lb. .59 - —
Dom., reg., bbls., c.l., dlvd. E..lb. .52 - —
bbls., t.c.l., ton lots, same basis lb. .53 - —
bbls., t.c.l., smaller lots, same basis..lb. .54 - —
Iron blue, imp., British, reg., bbls., c.l., dlvd. E..lb. .48 - —
bbls., t.c.l., ton lots, same basis lb. .49 - —
bbls., t.c.l., smaller lots, same basis..lb. .50 - —
Iron blue dlvd. prices 1c. higher for Pacific Coast states:—Wash., Ore., Cal., N. M., Ariz., Mon., Wyo., Utah, Col. and Nev.
Iron compounds (see Ferric or Ferrous)
Iron oxide, black, pure, bgs., c.l., works lb. .14¾- —
bgs., t.c.l., works..... lb. .15 - —
Iron oxide, brown, pure, bgs., c.l., works lb. .14¼- —
bgs., t.c.l., works..... lb. .14½- —
Iron oxide, metallic, brown, bgs., works lb. .05¼- —
Iron oxide, Persian Gulf, red, bgs., c.l., works lb. .08¾- —
Iron oxide, red, dom., pure, bgs., Bethlehem, Easton, E. St. Louis, New York City..lb. .14¼- —
Iron oxide, red, nat. 75-85% ferric oxide, bgs., c.l., works lb. .06¼- —
bgs., t.c.l., works ..... lb. .06½- —
Iron oxide, Spanish red, bbls., c.l., ex dock lb. .05¾ Nom.
bbls., t.c.l., ex dock ..... lb. .06 Nom.
bbls., t.c.l., ex whse. New York, lb. .06½ Nom.
Iron oxide, yellow, nat., French type, bgs., c.l., works lb. .06¼- —
Peruvian type, bgs., t.c.l lb. .023 - .024
Iron oxide, yellow, pure, light lemon shade bgs. c.l. works lb. .12¼- —
Other shades same basis lb. .12 - —
Isoamyl alcohol, dms. c.l., works, frt alld E lb. .27½- —
dms., t.c.l., same basis..... lb .29 - —
tanks, same basis ..... lb 25 - —
Isoborneol, cns. ..... lb 1.44 1.80
Isobornyl acetate, cns. ..... lb. .46 - .56
Isobornyl formate, dms. ..... lb. 1.20 - —
Isobornyl proprionate, dms. ..... lb. 1.25 1.35
Isobutyl acetate, perfume grade, cns. lb. .33 - —
Isobutyl acetate, solvent grade, dms., c.l., dlvd. E. of Rockies. lb. .15¼- —
dms., t.c.l. same basis ..... lb. .16¾- —
tanks same basis ..... lb. .12¾- —
Isobutyl alcohol, dms., c.l., dlvd. lb. .13½- —
dms., t.c.l., dlvd. ..... lb. .17 - —
tanks, dlvd. ..... lb. .13 - —
Isobutylene, 99%, tanks, works..gal. .38 - —
Isobutyl isobutyrate, dms., f.o.b. works..lb. .73 - —
Isobutyraldehyde, CP, dms., c.l., dlvd. lb. .27½- —
dms., t.c.l., dlvd. ..... lb. .28½- —
Tech., dms., c.l., dlvd..... lb. .22 - —
dms., t.c.l., dlvd. ..... lb. .23 - —
tanks, dlvd. ..... lb. .19½- —
Isobutyronitrile, dms., c.l., dlvd..lb. .52 - —
dms., t.c.l., same basis..... lb. .57 - —



• low sweetness • soluble, uniform • free flowing, anti-caking aid
• flavor-enhancing • pigment-absorbing
• non-reacting with other ingredients • fermentation agent
• bland, almost tasteless triturate

Lactose is an amazing sugar with unlimited uses. It can improve your present products and help you develop new ones. It can lower your costs, simplify your processing. New uses are being discovered for it every day.

Only Western can supply you with all forms of Lactose—five grades, ten granulations. Strict chemical and bacteriological specifications and a rigid quality control program assure highest quality.

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lactose
(F.D.A. APPROVED)

WESTERN CONDENSING COMPANY
Appleton, Wisconsin
World's Largest Producer of Lactose-Pure Milk Sugar

Distributed Nationally by Chemical Department, McKESSON & ROBBINS, INC.

Isobutyric acid, dms., c.l., t.l., dlvd. lb. .35 - —
dms., l.c.l., l.t.l., same basis.... lb. .36½- —
t.c., t.t., same basis ..... lb. .33 - —
Isoeugenol, cns. ..... lb. 3.40 - 4.25
Isoniazid, powd., bulk, kilo or more kilo. 18.00 - —
Isonicotinic acid, 100-lb fib dms., works lb. 4.25 - —
Isonicotinic acid hydrazide (see Isoniazid).
Iso-octyl alcohol dms., c.l., dlvd E. lb. .23½- —
dms., l.c.l., dlvd E ..... lb. .25 - —
tanks, dlvd E ..... lb. .21 - —
Isopentane, comi grade, tanks, f.o.b. Tex refy gal. .15½- —
Isophorone, dms., c.l., works .... lb. .29½- —
dms., l.c.l., works ..... lb. .25¼- —
tanks, works ..... lb. .22½- —
Isophthalic acid dms, c.l., works, frt equald lb. .152 - —
dms, l.c.l. same basis .... lb. .162 - —
Isopropanol (see Isopropyl alcohol).
Isopropyl acetate, dms, c.l., dlvd. lb. .14 - —
dms, l.c.l., same basis ..... lb. .15½- —
tanks, same basis ..... lb. .11½- —
Isopropyl alcohol, refd., 91%, dms., c.l., dlvd gal. .58 - —
dms., l.c.l., dlvd ..... gal. .68 - —
tanks, dlvd. ..... lb. .42 - —
Isopropyl alcohol, refd., 95%, c.l., dms., dlvd. gal. .60 - —
dms., l.c.l., dlvd..... gal. .70 - —
tanks, dlvd ..... gal. .44 - —
anhyd., c.l., dlvd. ..... gal. .62 - —
dms., t.c.l., dlvd ..... gal. .72 - —
tanks, dlvd. ..... gal. .46 - —
Isopropyl benzene (see Cumene).
Isopropyl ether, dms., c.l., dlvd lb. .09½- —
dms., l.c.l., dlvd ..... lb. .11 - —
tanks, dlvd ..... lb. .07 - —
Isopropyl-N-(3-chlorophenyl) carbamate (CIPC), tech., dms., c.l., t.l., works lb. 1.00 - —
dms., t.c.l., works ..... lb. 1.05 - 1.25
tanks, works. ..... lb. .99 - —
Isopropylamine (see Mono, Di, or Tri-)
Isopropyl-N-phenyl carbamate, 450-lb. fib. dms., c.l., t.l., works lb. .75 - —
450-lb fib. dms., l.c.l., works .. lb. .80 - .90
Isoquinoline, dms., works ..... lb. .65 - 1.25
Itaconic acid, refd. bgs. c.l., f.o.b. works lb. .53½- —
bgs., l.c.l., same basis ..... lb. .54½- —
Tech., bgs., c.l., same basis. lb. .58½- —
bgs., l.c.l., same basis..... lb. .39½- —

J

J acid, paste, bbls., works, 100% basis lb 2.70 - —
Powd. bbls same basis ..... lb 2.75 - —
Jalap root, NF, bls. ..... lb. .60 - —
NF, powd., bbls., bxs. ..... lb. .70 - .75
Japan wax, cs ..... lb. .27 - .29
Juniper berries, bgs..... lb. .16 - .17
Juniper berry oil, NF, bots..... lb. 2.90 - 3.75
Twice rectified bots. ..... lb. 3.25 - —
Juniper tar oil NF dms ..... lb. .42 - .60
Juniper wood oil, tech., cns. .... lb. .38 - .55

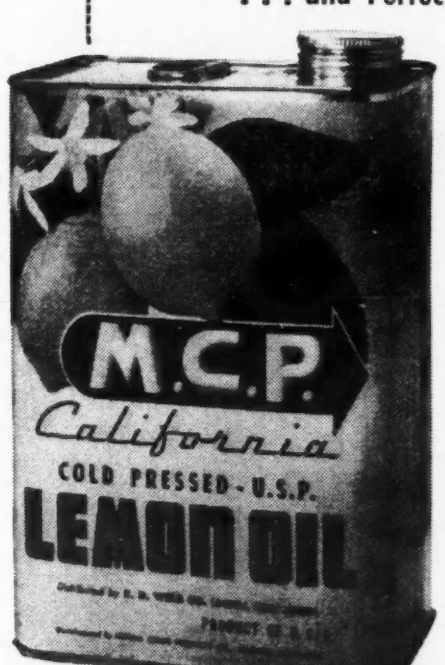
K

Kaolin (see also Clay, China).
Kaolin, NF, powd., fib. dms. .... lb. .10 - .12
NF, colloidal, 50-lb. bgs..... lb. .15½- .17½
Karaya gum No. 1, NF powd. bls lb. .45 - .48
No. 2, powd., bbls. ..... lb. .40 - .42
No. 3, powd., bbls ..... lb. .35 - .37
Koch acid, bbls., frt. alld., 100% basis lb 1.00 - —
Kola nuts, bgs. ..... lb. .13 - .15

L

L acid, bbls, works ..... lb 1.25 - —
Lacquer diluent, petroleum, 140°F-200°F b.r., tankcars, New Jersey and New York gal. .20 - —
Group 3 ..... gal. .15125- —
Houston, Texas ..... gal. .16 - —
Lacquer diluent, petroleum, 200°F-240°F b.r., tankcars, New Jersey or New York. gal. .20 - —
Group 3 ..... gal. .14125- —
Houston, Texas ..... gal. .16 - —
Lactic acid, edible, 50%, bbls. dms., c.l., frt. equald lb. .1985- —
bbls. dms., 20 or more, frt. equald lb. .2035- —
bbls. dms. 5 to 19 frt equald. lb. .2085- —
bbls., dms., 1 to 4, frt. equald. lb. .2135- —
Lactic acid, edible, 80%, bbls., c.l., dms., frt. equald. lb. .3335- —
bbls., dms., 20 or more, frt. equald lb. .3385- —
bbls dms 5 to 19 frt. equald. lb. .3435- —
bbls., dms., 1 to 4, frt. equald. lb. .3485- —
Plastic grade, 50%, c.l., bbls., works lb. .2740- —
bbls. 20 or more, works lb. .2790- —
bbls. 5 to 19, works .... lb. .2840- —
bbls. 1 to 4, works ..... lb. .2890- —
80%, bbls., c.l works..... lb. .4625- —
bbls. 5 to 19, works .... lb. 4725- —
bbls. 1 to 4, works ..... lb 4775- —
Tech., 44% bbls. c.l. works 100 lbs. 12.45 - —
bbls., l.c.l., works... 100 lbs. 12.85 - —
USP, 85% chys. ..... lb. .85 - —
Lactose, crystalline edible, bgs., 23,000-lb lots, frt equald lb. .14 - —
bgs., 6,000-lb lots, frt equald lb. .14½- —
bgs., 2,000-lb lots, frt equald lb. .14¾- —
bgs., 200-lb lots, frt equald lb. .15¼- —
Edible lactose in fib dms., ½c higher.
Lactose, ferment grade bgs., c.l., works lb 08¼- —
USP, reg., fib. dms., 30,000-lb. lots, frt equald lb. .21½- —
fib. dms. 2,000-lb lots, frt. equald lb. .22¼ —
200-1,880-lb. lots, frt. equald lb. .22¾ —
USP lactose in bags ½c to 1c lower
Lactose, USP spray dried, bgs., t.l., frt. equald lb. .18½- —
bgs. t.c.l. frt equald lb .19 .19¾
Lady's slipper root, bls ..... lb. 3.00 - 3.50
Lake C red toner alizarine, bbls, works lb 1.25 —
Lamp black, bgs. c.l., works lb .16 .45
Lanolin cosmetic, dms., works lb .27 .29
USP, anhyd, dms., works lb .24 .26
USP, hydrous, dms., works... lb. .23 .25
Lard, cash, dms., Chicago ..... lb. .0845- —
Lard oil (see Grease oil).
Larkspur seed, bgs ..... lb. .40 - .45
Laurel leaf oil, dms, cns. ..... lb 9.75 - 12.50
Laurent's acid, bbls ..... lb. .70 - —
Lauric acid, pure, dms..... lb. .38½- .41
tanks ..... lb. .36 - .37
Lauryl alcohol, bots. ..... lb 2.00 - 2.50
n-Lauryl methacrylate, dms., c.l., t.l works lb. 65½- —
dms., t.t.l., works lb .66 - —
Lavandin oil, 22-24%, dms. ..... lb 1.10 - 1.50
Abrial, dms. ..... lb 1.00 - 1.50
Lavender flowers, medium, bls lb .55 .60
Ord., bls. ..... lb .20 .25
Select., bls. ..... lb .90 1.00
Lavender flower oil, USP, French 35-37% ester, cns lb. 1.85 - 4.00
40-42% ester cns lb 5.00 - 7.75
Spike, Spanish, cns lb 2.20 - 3.00
Lead acetate, NF, cryst., gran., powd., bbls lb. .24½- —
White, cryst, bbls. ..... lb. .25½ —
gran., bbls. ..... lb. .26½- —
powd, bbls ..... lb. .26½- —
Lead arsenate, acid powder, dealers, 3-50 lb. bgs or any quantity, frt alld on $150 or more lb. .30½- —
1-lb bgs same basis lb. .47 - —
Lead, blue, basic sulfate bbls, c.l., shipt point, frt alld. lb. .17 - —
bbls., l.c.l., same basis ..... lb. .18 - —
Lead carbonate (see Lead, white, basic carbonate)
Lead chloride, dms ..... lb. .52 - —
Lead iodide, NF V jars ..... lb 3.82 - —
Lead linoleate, fused 26% Pb, dms. lb. .38 - —
Lead metal prime, pigs, New York. lb. .12½- —
St. Louis ..... lb. .1230- —
Lead monosilicate, bgs., c.l., works, frt. equald lb. .1385- —
bgs., l.c.l., same basis ..... lb. .1485- —
Lead naphthenate, liq., 16% Pb, dms., dlvd lb. .19½- —
24% Pb, dms., dlvd. ..... lb. .24¼- —
Solid, 37% Pb, dms., dlvd. .. lb. .31¾- —
Lead nitrate, bbls. ..... lb. .24¼- .26¾
Lead orthosilicate-gel, 50-60% PbO, dms., works lb. .29¾ .34¼
Lead peroxide, tech, powd, bbls lb. .45 - .50
Lead phthalate dibasic, dms., works. lb. .41 - —
Lead, red, 95% Pb_3O_4 or less, bbls., c.l., works, frt. equald. lb. .1425- —
bbls., l.c.l., same basis. lb. .1525- —
97% Pb_3O_4, bbls., c.l., same basis lb. .1445- —
bbls, l.c.l., same basis ..... lb. .1545- —
98% Pb_3O_4, bbls., c.l., same basis lb. .1460- —
bbls., l.c.l., same basis.... lb. .1560- —
Lead resinate precip 23% Pb, dms., ton lots, dlvd lb. .43¾- —
Lead salicylate normal, dms, works. lb. .46 —
Lead silicate (see Lead white basic silicate).
Lead silicochromate, bgs., c.l., f.o.b. mfrs. point, frt. alld lb. .20 - —
bgs., l.c.l., same basis ..... lb. .21 - —
Lead sulfate (see Lead blue basic sulfate)
Lead tallate, liq., 16% Pb, dms. lb. .17¼- —
24% Pb, dms ..... lb. .26¾- —
Solid, 30% Pb, dms. ..... lb. .23¼- —
Lead, white, basic carbonate, bgs., c.l., shipt. pt. frt. alld lb. .18 - —
bgs., l.c.l., same basis.... lb. .19 - —
Lead, white, basic silicate, bgs., c.l., shipt. pt., frt. alld lb. .16½- —
bgs., l.c.l., same basis ..... lb. .17½- —
Lead, white basic sulfate bgs., c.l., shipt. pt., frt. alld. lb. .17 - —
bgs. l.c.l., same basis..... lb. .18 - —
Lecithin, edible, tech., bleached, non-ret. dms., c.l., works. lb. .14 - .15
non-ret. dms., l.c.l., same basis lb. .15 - .16
unbleached, non-ret. dms., c.l., same basis lb. .13 - .14
non-ret. dms. l.c.l., same basis lb. .14 - .15
Lemon bioflavonoid complex, 100-lb. fib. dms., works lb. 7.70 - —
Lemon oil, USP, Calif., cns., dms. lb. 2.55 - 2.90
Messina, cns. ..... lb. 3.75 - 5.00
Lemongrass oil, cns., dms..... lb. 2.00 - 2.20
dl-Leucine, dms., works..... lb 12.25 - 15.00
Licorice root, gran., bls. ..... lb. .13 - —
Powd., bls. ..... lb. .15 - .16
Whole, bls. ..... lb. .09 - .10
Ligneloe wood oil, Mexican, cns lb 2.75 - 3.50
Lignosulfonate (see under ammonium or sodium lignin sulfonate)
Lime, chemical (quicklime), bulk, c.l., 50,000 lbs., works, E. ton 14.25 - —
Chemical, hydrated, bgs., c.l., same basis ton 17.25 - —
Chemical, spray, bgs c.l., same basis ton 18.25 - —
For New York delivery, add $6.20 freight charge.

ONE LABEL — *First Grade Only*
ONE PRICE — *That Saves You Money*
. . . and Perfect Performance for *Every* Purpose!



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Pure
Unadulterated
California
LEMON OIL
U. S. P.

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For nearly 30 years, Mutual Citrus Products Co. has been cold-pressing California lemon oil for distribution by others. Now, M.C.P. LEMON OIL is being *prepared and packed* under the M.C.P. label. There is only *one label* and *one* quality — *the highest* — for M.C.P. LEMON OIL. Yet, M.C.P. LEMON OIL costs you *less* . . . while providing a product that is unsurpassed for flavor, purity, and dependability . . . for *every* purpose.

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MUTUAL CITRUS PRODUCTS COMPANY
Since 1928 Growers and Processors of Citrus Products

Distributed by

MUTUAL CITRUS PRODUCTS CO.
424 South Atchison Street, Anaheim, Calif.

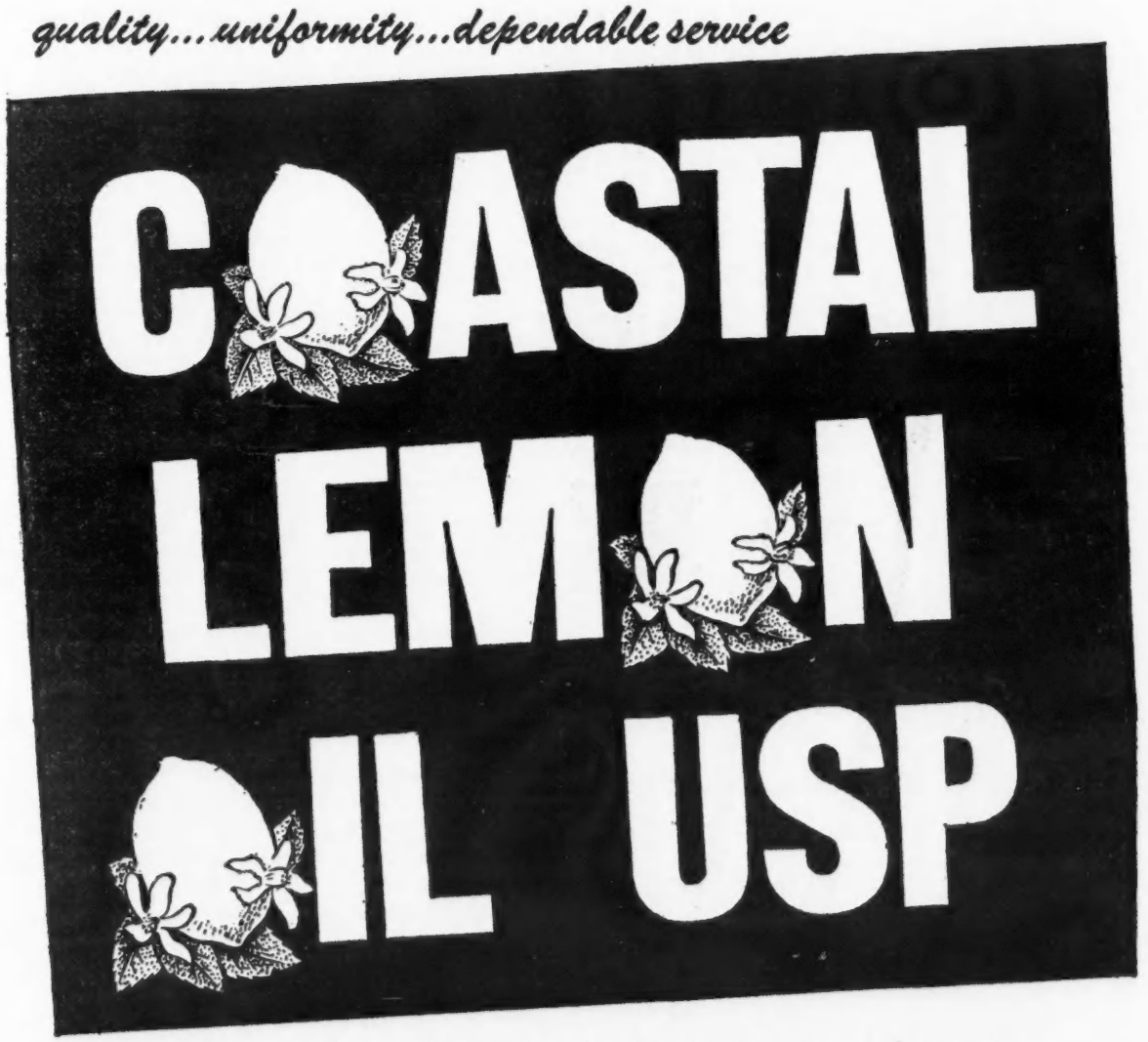
R. D. WEBB & CO., INC.
137 Boston Post Road, Cos Cob, Conn.

Lime oil, dist., Mexican, cns....lb. 5.90 - 6.75
West Indian, cns. ..... lb 6.50 - 7.80
Expressed, West Indian, cns lb. 7.75 - 8.75
Lime salts (see Calcium).
Lime-ammonium nitrogen, 20.5% N (see Ammonium nitrate with dolomite).
Linalool, ex bois de rose oil, dms. lb. 2.90 - 3.75
Syn., 88-100%, dms., works .. lb. 3.20 - 3.60
Linalyl acetate, ex bois de rose, 90-92%, dms. ..... lb. 2.75 - 3.40
96-98%, dms. ..... lb. 3.25 - —
Syn., 98-100%, dms., works .. lb. 3.40 - —
Lindane, 25% formulation to distributors dms., frt. alld lb. 1.35 - 1.50
Lindane, tech., to formulators, dms., 1-2,000 lbs. dlvd lb 2.40 - —
Linden flowers, with leaves, bls lb. .35 - .40
Without leaves, bls..... lb. .42 - .45
Linseed meal, expeller, 32% bulk, Minneapolis, mills .. ton.75.50 - —
Extracted, 34% bulk, same basis. ton.65.00 - —
Linseed oil, raw, dms., c.l., New York lb. .1760- —
dms., l.c.l., New York ..... lb. .1850- .1925
tanks, f.o.b., Minneapolis .. ton. .1400- —
tanks, New York ..... lb. .1511- —
tankwagon, New York ..... lb. .1561- —
Boiled linseed oil, .006c. per lb. higher.
Linseed oil, acid, dist., dms. .... lb. .2110- —
Water-white, dms. ..... lb. .2410- —
Litharge, coml., powd. bbls., c.l., works, frt. equald lb. .1375- —
bbls., l.c.l., same basis .. lb. .1475- —
Lithium aluminum hydride, lump, dms. works lb.33.00 -39.00
Lithium benzoate, dms lb 1.65 1.67
Lithium bromide, NF, gran., bgs., works, frt. equald lb. 2.60 - —
Lithium carbonate, NF, dms. c.l., t.l., dlvd lb 1.29½- —
dms., ton lots to t.l., dlvd lb. 1.30 1.30½
Tech., dms., c.l., t.l., frt alld lb. .67 - —
dms., ton lots, same basis lb. .73 - —
dms., smaller lots same basis. lb. .79 - —
Lithium chloride CP, anhyd., dms., ton lots lb 1.23½- —
Tech. anhyd., dms. c.l., t.l., dlvd. or works, frt. alld lb. .87 - —
dms., l.c.l., same basis lb. .88 - .92
Lithium citrate NF dms. ton lots. lb 1.50 - —
Lithium fluoride, dms., 20,000-lb. lots, dlvd lb 2.15 - —
bbls., ton lots and more dlvd lb 2.18½- —
bbls., less ton lots, dlvd lb 2.23½- —
Lithium hydride powd., dms. 500-lb lots or more works lb 9.50 - —
Lithium hydroxide, monohydrate, dms. c.l., t.l., frt alld lb. .72 - —
dms. l.c.l. frt alld lb .73 - —
Lithium manganite, cms. works lb. .95 1.05
Lithium nitrate, tech., dms., 100-lb lots lb 1.15 1.25
Lithium salicylate, dms lb 1.60 1.70
Lithium silicate, dms., works lb 1.10 1.20
Lithium stearate, dms. c.l., works. lb .47½- —
dms., ton lots, works .... lb. .48½- —
dms., less-ton lots, works .. lb. .53½- —
Lithium sulfate, dms., 100-lb. lots. lb. 1.15 - 1.25
Lithium titanate, dms., works lb. 1.15 - 1.25
Lithol red toner, barium, bbls., works lb. .98 - —
Lithol-rubine red toner, pure bbls., works lb 1.50 - —
Resinated, bbls. works lb 1.47 - —
Lithopone, ord., bgs. c.l. dlvd E. lb. .08⅜- —
bgs., l.c.l., dlvd E lb. .09⅛- —
Titanated (high-strength), bgs., c.l., dlvd lb. .11 - —
bgs., l.c.l., dlvd. ... lb .12 - —
Lobelia herb, bls lb. .55 - —
Lobeline sulfate, bots., 50-oz. lots, works oz.30.00 - —
Locust bean gum, powd., bgs .. lb. .38 - .40
Lycopodium, cs. ..... lb. 3.25 - 3.50
l-Lysine monohydrochloride, 25-lb. dms lb. 4.95 - —

M

Mace, Siauw, No. 1, bls.....lb. 1.90 - —
No. 2, whole, bls..... lb. 1.65 - —
siftings, bls. ..... lb. 1.60 - —
Mace oil, dist., cns., dms ..... lb 9.75 -12.25
Magnesia, calcined, tech., bgs., cns., frt equald lb. .25¾- .26½
Tech., syn., rubber grade, light, bgs., c.l., frt. equald lb. .28¾- .30
rubber grade, extra light, bgs., c.l., frt equald lb. .28 - —
bgs., l.c.l., frt. equald lb. .28¾- —
Above prices are quoted f.o.b. works, freight equald, with Metropolitan New York and competitive producing points
Magnesia, calcined, tech., heavy, 85%, bgs., c.l., f.o.b. Luning, Nev ton.39.50 - —
91%, bgs., c.l., same basis. ton.49.50 - —
95%, bgs., c.l., same basis. ton.59.00 - —
USP, light, bgs. ..... lb. .36½- .37½
USP, heavy, bgs. ..... lb. .36½- .37½
Magnesite, chemical grade, calcined, powd., bgs c.l., works, frt. equald ton.86.25 - —
Chemical grade, deadburnt, standard grain, bulk, c.l., Chewelah, Wash. ....ton.46.00 - —
Magnesium bromide, cs. jars .. lb. .93 - 1.00
Magnesium carbonate, tech., bgs., c.l., frt. equald lb. .11 - —
bgs., t.l., frt. equald ..... lb. .11½- —
bgs., l.c.l., frt equald .. lb. .13½- .14
USP, bgs., c.l., frt. equald....lb. .13½- —
bgs., t.l., frt. equald ..... lb. .14 - —
bgs., l.c.l., frt equald ... lb. .15 - .16
Above prices are quoted f.o.b. works, freight equald, with Metropolitan New York and competitive producing points.
Magnesium chloride, anhyd., 92%, flake or pebble, dms., c.l., works lb. .12¾- —
dms., l.c.l., works ..... lb. .14 - .15
Hydrous, 99%, flake, bgs., c.l., works..ton.55.00 - —
bgs., l.c.l., works ... ton.65.00 -80.00
Magnesium gluconate, 100-lb. dm., f.o.b. works E lb. 1.42 - —
Magnesium hydroxide, NF, powd., dms., 500-lbs. or more, f.o.b., works lb. .24½- .25½
Magnesium lauryl sulfate, dms., c.l., frt. alld lb. .22½- —
dms., l.t.l., frt. alld..... lb. .23½- —
tanks, frt. alld..... lb. .21½- —
Magnesium metal, 99.8%, ingots, 10,000-lb. lots or more, works lb. .36 - —
pigs, 10,000-lb. lots or more, works lb. .35¼- —
sticks, cs. works frt. alld. on carlots lb. .59 - —
Magnesium nitrate, cryst., dms., works lb. .29 - —
Magnesium oxide (see Magnesia, calcined).
Magnesium phosphate, tribasic, NF, bbls. lb. .78 - —
Magnesium silicate (see Talc).
Magnesium silicofluoride, dms., works..lb. .10¼- .12
Magnesium sulfate, tech., bgs., c.l., works..100 lbs. 2.15 - —
bgs., l.c.l., works. .....100 lbs. 2.90 - 3.15
USP, cryst., bgs., c.l., works, 100 lbs. 2.35 - —
bgs, l.c.l., 5,000 lbs., 1 withdrawal..100 lbs. 3.10 - —
bgs, smaller lots.....100 lbs. 3.35 - —
Magnesium trisilicate, USP, fib. dms., 5,000-lb. lots. lb. .38 - —
fib. dms., 1,000-lb. lots..... lb. .40 - —
fib. dms., 100-lb. lots..... lb. .45 - —
Bulky and super grades of magnesium trisicilate 7c. per. lb. higher.
Malachite green, straight, PTMA, bbls, works lb. 5.30 - —
Malathion, dms., c.l., works..... lb. .89 - —
dms., l.c.l., works..... lb. .92 - 1.01
Maleic acid, cryst., powd., dms lb. .37¼- —
Maleic anhydride, dms., c.l., frt. equald..lb. .23½- —
dms., l.c.l., frt. equald. ..... lb. .25 - —
tanks, dlvd., frt. equald. ..... lb. .22½- —
Malic acid, tech., dms. ..... lb. .50 - —
Mandelic acid, NF, dms., 1,000-lb. lots lb. 2.35 - —
dms., smaller lots..... lb. 2.40 - 2.50
Mandrake root, bls..... lb. .40 - —
Manganese acetate, dms., dlvd.... lb. .35 - —
Manganese borate, tech., fib. dms. lb. .23¼- —
Manganese carbonate, chemical grade, 48% Mn, bgs., 20,000-lb. lots and more, works..lb. .11 - .16
Manganese chloride, CP, anhyd., dms., 20,000-lb. lots, works lb. .21¼- —
smaller lots, works..... lb. .23½- —
Manganese dioxide, African, 83-87%, 40,000 to 99,999-lb. lots, burlap paper lined bgs., gross for net works..ton.148.00 - —
40,000 to 99,999-lb. lots, paper bgs., same basis..... ton.144.50 - —
40,000 to 99,999-lb. lots, dms. same basis. ton.152.50 - —
Prices for manganese dioxide in 10,000 to 40,000-lb. lots, $3 per ton higher.
Manganese gluconate, dms. .....lb. 1.84 - —
Manganese hydrate, dms., dlvd..lb. .35 - —
Manganese hypophosphite, NF, dms. lb. 3.53 - —
Manganese linoleate, liq., 4.35% Mn, dms. lb. .35¼- —
Solid, precip., 8.2% Mn, bbls..lb. .41¼- —
Manganese metal, electrolytic, dms., c.l., dlvd. E. .....lb. .34 - —
dms., ton lots, dlvd. E. .....lb. .36 - —
dms., smaller lots, dlvd. E...lb. .38 - —
Manganese naphthenate, liq., 6% Mn, dms., frt. alld. lb. .29¼- —
Manganese resinate, fused, 3½% Mn, dms..lb. .29¼- —
Precip., 6½-7% Mn, dms. .....lb. .37 - —
Manganese sulfate, fertilizer grade, 65% $MnSO_4$, bgs., c.l., dlvd S. E. ton.97.50 - —
bgs., l.c.l., dlvd. S. E...ton.104.50 - —
Manganese tallate, 6%, dms.....lb. .26½- —
Manila copal gum, C, bgs. .....lb. .35 - .39
DBB, bgs. .....lb. .25 - .28
DK, bgs. .....lb. No stocks.
DK, dust bgs. .....lb. .14 Nom.
MA, soft, bgs. .....lb. .20 - .24
WS, bgs. .....lb. No stocks.
Mannitol, com'l, fib. dms., ton lots, works lb. .60 - —
fib. dms. to ton lots, works lb. .62 - —
fib. dms., single dms., works. lb. .65 - —
Marine pitch, dms. .....lb. .04¼- .05
MBTS (see Mercaptobenzothiazyl disulfide).
MBT (see 2-Mercaptobenzothiazole).
Melamine, bgs., c.l., works.....lb. .27½- —
bgs., l.c.l., works .....lb. .29 - —
Menadione, USP, bots. .....gram. .044 - .09
Menhaden oil, crude, tanks, works, Atl. & Gulf..lb. .07 - —
Menthol, nat., USP, Brazilian, cs. lb. 7.25 - 7.50
Japanese, cs. .....lb.11.75 -12.00
Syn., USP, racemic, cns.....lb. 4.50 - —
2-Mercaptobenzothiazole, bgs., fib. dms., ton lots, works, frt. alld..lb. .44 - —
bgs., fib. dms. less ton lots, same basis lb. .46 - —

quality...uniformity...dependable service



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Mercaptobenzothiazyl disulfide bgs., fib dms. ton lots, works, frt alld lb. .54 - —
bgs. fib dms. less ton lots, same basis lb. .56 - —
Mercuric chloride, NF cryst. dms., 50-lb lots or more lb 4.98 - —
USP gran. or powd., 50-lb. dm., 100 lbs. f.o.b works lb 4.78 - —
Mercuric cyanide, NF VIII, powd., fib dms lb 6.84 - —
Mercuric iodide red, NF, 100-lb. dm., f.o.b works lb 7.72 - —
Mercuric oxide, red., NF IX, 50-lb. dm. 100 lbs. f.o.b works lb 5.97 - —
tech., 50-lb. dm., 100 lbs., same basis lb 5.77 - —
Mercuric oxide, yellow, NF, 50-lb. dm., 100 lbs., same basis lb 6.14 - —
tech., bbls. 1,000-lb lots lb 5.58 - —
bbls. smaller lots lb 5.60 - —
Mercurous chloride (see Calomel)
Mercurous iodide, yellow, NF, 100-lb. dm., f.o.b. works lb. 8.22 - —
Mercury, ammoniated (see White precipitate USP XV)
Mercury metal, 76 lbs. per flask, net-flask 212.00 -214.00
Mesityl oxide, dms., c.l., dlvd. lb. .15 - —
dms., l.c.l., dlvd. lb .16½- —
tanks, dlvd. lb 12½- —
Meta-aminophenol (see m-Aminophenol).
Metachloroaniline (see m-Chloroaniline).
Metanilic acid, dms., works lb .57 .75
Metanitroparatoluidine (see m-Nitro-toluidine).
Metanitroaniline (see m-Nitroaniline).

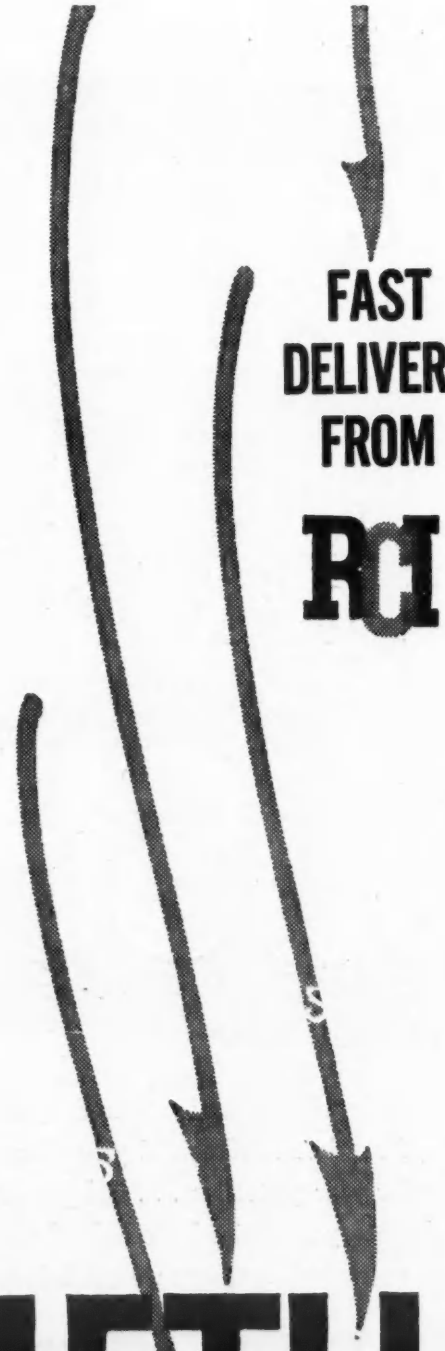
Metaphenylenediamine (see m- Phenylenediamine)
Metatoluidine (see m-Toluidine).
Metatolylenediamine (see 2,4-tolylenediamine).
Methacrylic acid glacial, 98%, dms., truckloads, frt. equald lb. .42½- —
dms., smaller lots, frt. equald, lb. .43 - .75
tanks, works, frt. equald lb. .40 - —
Methanol, nat., denaturing grade, tanks, frt. alld gal. .85 - —
Syn. zone 1, dms., c.l. or t.l. min. dlvd gal. .51½- —
dms., l.c.l., dlvd gal. .61½- —
tankwagon, 2,000-4,000 gal. lots, dlvd. Metropolitan area gal. .35 - —
tankwagon, 4,000 gal. min., dlvd gal. .30 - —
tankwagon, 4,000 gal. min., f.o.b terminal gal. .29 - —
Syn., zone 2, dms., c.l., or t.l., min., frt. alld or dlvd gal. .55½- —
dms., l.c.l., works gal. .65½- —
tankwagon, 2,000-4,000 gal. lots, min., dlvd., Metropolitan area gal. .39 - —
tanks, 4,000 gal. min. dlvd. gal. .34 - —
Synthetic methanol zones are: Zone 1 is all continental US E. of eastern boundaries of Ariz., Idaho and Utah. Zone 2 is remainder of US west of above state boundaries comprising Ariz., Calif., Idaho, Nev., Ore., Utah and Wash.

Methapyrilene fumarate, 100-999 lbs., dms., f.o.b. works, frt. equald lb. 21.75 - —
Methapyrilene hydrochloride, 100-999 lbs., dms., f.o.b. works, frt. equald lb. 27.25 - —
Methenamine (see Hexamethylenetetramine).
Methionine hydroxyanalogue, (calcium salt) 90% min., dms., t.l., frt. alld. lb. 1.10 - —
dms., l.t.l., same basis lb. 1.16 - —
dl-Methionine, fib. dms., frt. alld., 50-lb. or more lb. 3.50 - —
Feed grade 98%, fib. dms., same basis lb. 1.55 - —
Methyoxychlor, 50% wettable powder, dealers, dms., cs. lb. .66 - —
Methyl abietate non-ret. dms., c.l., dlvd. zone 1 lb. .21½- —
non-ret. dms. t.c.l., same basis lb. .22 - .22½
Methyl abietate, hydrogenated, non-ret. dms., c.l., dlvd. zone 1 lb. .23½- —
non-ret. dms., l.c.l., same basis, lb. .24 - .24½

Zone 1 includes New England and Middle Atlantic states, Va., W. Va., N. C., Ohio., Ky., Mich., Ind., Ill., Wis., St. Paul and Minneapolis, Minn.; St. Louis, Mo.; Miss., Ala., Ga., Fla., S. C. and Tenn.

Methyl acetone, nat., dms., l.c.l., E. of Miss., frt. alld gal. .62½- —
Syn., dms., c.l., frt. alld E. gal. .66 - —
dms., l.c.l., frt alld. E. ... gal. .76 - —
tanks, frt. alld. E. ..... gal. .51 - —
Synthetic methyl acetone E. territory comprises all states East of and including Colo., Mont., N. Mex. and Wyo. West territory is made up of all states west of those four.

Methyl acrylate, dms., c.l., t.l., dlvd. lb. .39 - —
dms., t.t.l., dlvd. ..... lb. .40 - —
tanks, dlvd. ..... lb. .37 - —
Methyl alcohol (see Methanol).
Methyl amyl acetate, dms., c.l., dlvd. E. lb. .17 - —
dms., t.c.l., dlvd. E. ..... lb. .18½- —
tanks, dlvd. E. ..... lb. .14½- —
Methyl amyl alcohol, dms., c.l., dlvd. lb. .17 - —
dms., t.c.l., dlvd. ..... lb. .18½- —
tanks, dlvd. ..... lb. .14½- —
Methyl amyl ketone, dms. works lb. 1.05 - —
N-Methylaniline tech. tanks, frt. alld. lb. .60 - —
Methylanthranilate, cns. ..... lb. 2.45 - 3.00
Methyl benzoate cns., dms. ... lb. .60 - .75
Methyl bromide, service organization prices, 40 to 375-lb. cyls., large lots, frt. alld lb. .62 - .68
Methyl cellulose, special vis., (1,500-4,000 cps.) 50-lb bgs., c.l., works lb. .82 - —
50-lb. bgs., 2,000-lb. lots and more, same basis ... lb. .89 - —
50-lb. bgs. smaller lots, frt. alld on 100 lbs lb. 1.05 - —
Standard vis. (15,400 cps.) 50-lb. bgs., c.l., frt. alld lb. .69 - —
50-lb bgs., 2,000-lb. lots and more, same basis lb. .76 - —
50-lb bgs. smaller lots, frt. alld. on 100-lbs lb. .79 - .88
Methyl chloride, indust., cyls., frt. equald lb. .22¼- —
tanks, multi-unit, same basis, lb. .16¼- —
tanks, single unit, same basis, lb. .12¾- —
Methyl chloride, refrigerator mfrs. cyls., dlvd lb. .48¾- —
other consumers or service men, cyls., dlvd lb. .67¾- —
Methyl chloroform (see 1,1,1-Trichloroethane).
Methyl cinnamate, cns. ..... lb 1.55 - 1.80
Methyl ethyl ketone, dms., c.l., dlvd lb. .15 - —
dms., t.c.l., dlvd ..... lb. .16½- —
tanks, dlvd. ..... lb. .12½- —
2-Methyl-5-ethyl pyridine, dms., c.l., works lb. .45 - —
dms., t.c.l., works ..... lb. .45¾- —
tanks, works ..... lb. .43 - —
Methyl formate, refd., dms. lb. .35 - .40
Tech., non-ret. dms., any quantity works lb. .10 - —
tanks, works lb. .07 - —
a-D Methyl glucoside, tech., 100-lb. multiwall paper bgs., c.l., works lb. .21 - —
100-lb multiwall paper bgs., t.l., min. 23,000 lbs., works lb. .21¼- —
100-lb. multiwall paper bgs., l.c.l., works lb. .23 - —
Methyl heptin carbonate, bots lb. 28.00 - 31.00
Methyl p-hydroxybenzoate, fib. dms. lb 1.90 - 2.00
Methyl ionone, standard, cns., dms. lb. 3.40 - 3.65
Methyl isobutyl carbinol (see Methyl amyl alcohol).
Methyl isobutyl ketone, dms., c.l., dlvd lb. .17 - —
dms., t.c.l., dlvd ..... lb. .18½- —
tanks, dlvd lb. .14½- —
Methyl methacrylate, dms., c.l., t.l., frt equald with Belle, W. Va lb. .31 - —
dms., smaller lots, same basis lb. .31½- —
tanks, same basis lb. .29 - —
Methyl naphthyl ketone, cryst., cns lb 2.45 - 4.30
Methyl parahydroxybenzoate (see Methyl p-Hydroxybenzoate)
Methyl parathion tech. 80% dms., frt. alld E lb. .84 - —
Methyl parathion prices 2c. per lb. higher in West.
Methyl roseaniline chloride, NF., 5-lb fib dms. lb 6.90 - —
Methyl salicylate, dms. t.l., frt. alld lb. .60¼- —
dms., t.c.l. same basis lb. .62½ - .67½
Methyl testosterone USP 100-gram bots. gram No Prices.
2-Methyl-5-vinyl pyridine, 40-dm. lots or more, f.o.b. works lb. 1.30 - —
5-39-dm. lots, same basis .... lb. 1.35 - —
tanks, same basis ..... lb. 1.25 - —
Methyl violet toner, molybdated, PMA, bbls., dlvd. E of Rockies lb 2.80 - —
Tungstated, PTMA, bbls., same basis lb. 4.35 - —
Methyl violet prices 1c higher W. of Rockies.
Methylene blue, fib. dms., 100-lb. lots, frt. adjusted lb 3.25 - —
Methylene chloride, tech., straight or assorted, dms., c.l., or t.l., dlvd lb. .13½- —
dms. t.c.l. t.t.l. dlvd lb. .15¾- —
Tech., tanks, 4,000-gal. min., dlvd. lb. .12¼- —
tanktrucks, 1,000-gal. min., dlvd. lb. .13¼- —
b-Methylnaphthalene, 32°C., m.p., dms., works lb. .90 - —
Methylpentanediol (see Hexylene glycol).
Methylphenylpyrazolone (see 1-phenyl-3-methylpyrazolone-5).
Methylthionine chloride (see Methylene blue).
Mica, dry-grd., paint, plastic, 100 mesh, bgs. c.l., works lb. .04 - —
roofing, 20 to 80 mesh, works lb. .03 - —
Mica, wet-grd., biotite bgs., c.l., works, frt. alld. E lb. .06½- —
bgs. l.c.l. ex whse. ..... lb. .07¼- —
paint or lacq., bgs., c.l., 325 mesh works frt. alld E. lb. .08¼- —
bgs. l.c.l. ex-whse. or freight alld. E lb. .09 - —
rubber bgs., c.l., works, frt. alld. E lb. .08 - —
bgs., l.c.l., ex-whse or frt. alld. E lb. .08¾- —
wallpaper bgs., c.l., works, frt. alld. E lb. .08¾- —
bgs., ex-whse. or frt. alld. E lb. .09 - —
white, 5-10 microns, bgs., c.l., works, frt. alld. E lb. .08¼- —
Mica, wet-grd. W. of Miss. 4c. higher; W. of Rockies 1c. higher.
Microcrystalline wax, petroleum, coating grades, tankcars, works lb. .10 - .11
laminating grades, tankcars, works lb. .11 - .12
Mineral black, bgs., works ..... lb. .0160- .0673
Mineral oil, white, tech., 50-65 vis., non-ret. dms., c.l., f.o.b. refy gal. .65 - —
50-65 vis., non-ret. dms., l.c.l., basis gal. .70 - —
tankcars, refy. ..... gal. .49 - —
65-75 vis., non-ret. dms., c.l., same basis gal. .65 - —
non-ret. dms., l.c.l., same basis gal. .70 - —
tankcars, refy. ..... gal. .49 - —



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Sulfuric Acid • Methanol

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RCI BUILDING, WHITE PLAINS, N.Y.

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METHANOL

Mineral oil, white, NF, 80-90 vis., non-ret. dms., c.l., same basis gal. .68 • —
non-ret. dms., l.c.l., same basis gal. .71 • —
tankcars, refy. gal. .50 • —
135-138 vis., non-ret. dms., c.l., same basis gal. .72 • —
non-ret. dms., l.c.l., same basis gal. .77 • —
tankcars, refy. gal. .56 • —
145-155 vis., non-ret. dms., c.l., same basis gal. .78 • —
non-ret. dms., l.c.l., same basis gal. .83 • —
tankcars, refy. gal. .62 • —
USP, 180-190 vis., non-ret. dms., c.l., same basis gal. .80½ • —
non-ret. dms., l.c.l., same basis gal. .85½ • —
tankcars, refy. gal. .64½ • —
USP, 200-210 vis., non-ret. dms., c.l., f.o.b. refy gal. .82½ • —
non-ret. dms., l.c.l. gal. .87½ • —
tankcars, refy. gal. .66½ • —
USP, 340-350 vis., non-ret. dms., c.l., f.o.b. refy gal. .87½ • —
non-ret. dms., l.c.l. gal. .92½ • —
tankcars, refy. gal. .71½ • —
(for f.o.b. N. Y. add 2c. for tankcars, 2c. for c.l. and 3c. for l.c.l. non-ret. dms.)

Mineral orange American, bbls., c.l., works lb. .1550 • —
bbls., c.l., same basis lb. .1650 • —

Mineral spirits, petroleum, odorless, tankcars, New Jersey gal. .29 • —
New York gal. .305 • —
Houston, Texas gal. .25 • —
Regular, tankcars, New Jersey and New York gal. .18 • —
Group 3 gal. .12875 • —
Houston, Texas gal. .145 • —

Mink oil, dms lb. 2.75 • —

Mirbane oil (see Nitrobenzene)

MNPT maroon toner, kgs., c.l., works lb 6.30 • —

Molasses, blackstrap, feed grade tanks, New Orleans gal. .09½ • —
tanks, New York gal. .13½ • —

Molybdated orange, bbls. lb. .49 • —

Molybdenum metal, powd., 80 or 200 mesh, ctns., works kilo 7.84 • —
325 mesh ctns., works kilo 9.13 • —

Molybdenum trioxide purif., dms., works lb 1.15 • —
Tech. chemical dms. works, basis Mo content lb 1.48 • —
Tech., metallurgical, dms., works, basis Mo. content lb. 1.47 • —

Molybdic acid, 85%, dms. works lb. 1.05 • 1.15

Monoallylamine, dms., c.l., dlvd lb. .965 • —
dms., c.l., dlvd. lb. .995 • —
tanks, dlvd. lb. .96 • —

Monobutylamine, dms., c.l., dlvd E. of Rockies lb. .57½ • —
dms., l.c.l., same basis lb. .59 • —
tanks, same basis lb. .55 • —

Mono-tert-butyl-m-cresol, dms., c.l., works lb. .55 • —
dms., l.c.l., works lb. .56 • —
tanks, works lb. .54 • —

Monochloracetic acid, purif. (see Chloroacetic acid, mono)

Monochlorobenzene, dms., c.l., frt. alld or dlvd E lb. .10½ • —
dms., l.c.l., same basis lb. .11½ • —
tanks, same basis lb. .08¾ • —

Monoethanolamine dms. c.l. dlvd. E lb. .27½ • —
dms., l.c.l., same basis lb. .29 • —
tanks, same basis lb. .25 • —

Monoethylalphanaphthylamine (see N Ethyl-a-naphthylamine).

Monoethylamine, 70% aqueous, solution, dms., c.l., dlvd. E. 100% basis lb. .38½ • —
dms., l.c.l. dlvd E 100% basis. lb. .40 • —
tanks, dlvd. E., 100% basis lb. .35 • —

Monoethylaniline (see N-Ethylaniline).

Monoethylorthotoluidine (see N-Ethyl-o-toluidine).

Monoisopropanolamine, dms., c.l., dlvd E lb. .27½ • —
dms., l.c.l., same basis lb. .29 • —
tanks, same basis lb. .25 • —

Monoisopropylamine, anhyd., dms., c.l., dlvd lb. .33½ • —
dms., l.c.l. same basis lb. .35 • —
tanks, same basis lb. .31 • —

Monomethylamine, anhyd., cyls., l.c.l. frt equald., 100% basis lb. .30 • —
tanks, 100% basis lb. .26 • —
30-33% soln., dms., c.l., frt. equald., 100% basis lb. .36 • —
dms., l.c.l., frt. equald., 100% basis lb. .36½ • —
tanks, frt. equald., 100% basis. lb. .26 • —
40% soln., dms., frt. equald., 100% basis lb. .33 • —
dms. l.c.l. frt equald., 100% basis lb. .33½ • —
tanks, frt. equald, 100% basis. lb. .26 • —

Monopentaerythritol tech., bgs., c.l., dlvd. E lb. .31 • —
bgs., l.c.l., dlvd. E lb. .32 • —

Monopotassium glutamate, dms., 1,000-lb. lots, frt. alld lb. 3.05 • —
dms. 100-lb lots, same basis lb 3.25 • —

Monosodium glutamate dms., 100 lbs., dlvd lb. 1.00 • 1.15

Monosodium phosphate (see sodium phosphate, monobasic).

Montan wax, Calif., refd., bgs lb. .27 • .28
imp., crude, Bohemian, bgs. lb. .22 • .24
German, bgs lb. .26 • .27

Morphine, cns., 100-oz., f.o.b. works, oz. 12.35 • —

Morphine hydrobromide, cns., 100-oz., f.o.b. works oz. 9.90 • —

Morphine hydrochloride, NF, cns., 100-oz., f.o.b. works oz. 9.90 • —

Morphine sulfate, USP, cns., 100-oz., f.o.b. works oz. 9.90 • —

Morpholine, dms., c.l., dlvd. E lb. .55¼ • —
dms., l.c.l., dlvd. E. lb. .56¼ • —
tanks, dlvd. E. lb. .52¾ • —

Muriatic acid (see Hydrochloric acid).

Musk, syn., ambrette, fib dms., 100-lb. lots lb 4.40 • 4.90
cns., 25-lb lots lb. 4.50 • 5.00
Ketone, fib. dms., 100-lb. lots. lb 4.60 • 5.10
cns. 25-lb. lots lb 4.70 • 5.20
Xylol, fib. dms., 100-lb. lots. lb. 1.26 • —
cns., 25-lb. lots lb. 1.40 • —

Mustard seed, Danish yellow, bags. lb. .11½ • —
Montana, yellow, bgs lb. .10½ • —
Oriental, bgs. lb. .08 • —

Mustard oil, syn bots. lb 1.60 • 1.85

Myristic acid, bgs lb. .31 • .33
tanks lb. .30½ • .32

Myrrh gum, cs lb. .55 • —

N

Naphtha, high solvency (see Solvent naphtha, petroleum)

Naphtha, petroleum, cleaner's (see Cleaner's naphtha)

Naphtha, VM&P, petroleum, tankcars, New Jersey and New York gal. .19 • —
Group 3 gal. .13875 • —
Houston, Texas gal. .155 • —

Naphthalene, crude, dom., 74°, tanks, frt. equald lb. .04¼ • —
78°, tanks, same basis lb. .05 • —
imp., 78°, bgs., large lots lb. .09½ Nom.
Refd., indust., chipped, crushed, bgs., frt. equald lb. .12½ • —
tanks, same basis lb. .09¾ • —
Refd., indust., balls, flakes, wholesalers, jobbers, bbls., c.l., same basis lb. .15½ • —
cs., 50 lbs., c.l., same basis, lb. .15¾ • —
1-lb. pkgs., c.l., same basis. lb. .18½ • —

a-Naphthol, dms., frt. alld. lb. 1.00 • —

b-Naphthol, tech., flake, bbls., c.l., works lb. .33 • —
bbls., l.c.l., works lb. .35 • —

Naphthol, ITR, red toner, bbls., works lb. 5.00 • —

1-Naphthol-3,6-disulfonic 8-amino acid (see H acid).

1-Naphthol-4 sulfonic acid (see Nevile and Winther's acid).

1-Naphthol-5-sulfomc acid (see L acid).

1-Naphthol-5-sulfonic 8-amino acid (see S acid).

2-Naphthol-6,8-disulfonic acid (see Gamma acid).

Naphthol sulfonic mixed acid (see Cleve's acid).

a-Naphthylamine, dms., frt. alld. lb. .50 • —

b-Naphthylamine, tech., flake, bbls., works lb. 1.50 • —

1-Naphthylamine-5-sulfonic acid (see Laurent's acid).

2-Naphthylamine-4,8-disulfonic acid (see Cassella acid).

2-Naphthylamine-1-sulfonic acid (see Tobias acid).

2-Naphthylamine-6-sulfonic acid (see Broenner's acid).

2-Naphthylamine-7-sulfonic acid (see F acid).

Naringin, fib. dms lb. 8.50 • •

Neatsfoot oil, 15° cold test, dms lb. .29 Nom.
20° cold test, dms lb. .28 Nom.
30° cold test, dms lb. .27 Nom.

Neocinchophen, USP, dms., frt. adjusted lb. 7.00 • 8.00

Neomycin sulfate, fib. dms., 1-kilo basis activity gram. .25 • —
fib. dms., 100-999-gram lots, basis activity gram. .30 • —
Tech., fib. dms gram. .13½ • —

Neopentylglycol, dms., c.l., dlvd lb. .32 • —
dms., l.c.l., same basis lb. .33 • —

Neroli oil, NF, French, bots. lb. 425.00 • 575.00
Tunisian, bots. lb. 400.00 • —

Nerolin, cns. lb. 2.45 • 2.85

Neville and Winther's acid, dms., frt. alld lb. 1.30 • —

Niacinamide (see Nicotinamide).

Nickel acetate, bbls., dlvd lb. .68½ • .75½

Nickel carbonate, bbls., dlvd lb. .78¼ • .85¼

Nickel chloride, bbls., dlvd lb. .37 • .45

Nickel formate, bbls., ton lots, frt. alld lb. .72 • .72

Nickel metal, electro cathodes, cs., works lb. .74 • —

Nickel nitrate, dms., frt. alld lb. .31½ • .33½

Nickel oxide, black, bbls lb. .85 • —
Green, bbls. lb. .84 • —

Nickel sulfate bgs. c.l. dlvd lb. .28 • —
bgs., l.c.l., dlvd lb. .28½ • .30

Nicotinamide, USP 50-kilo dm. frt. adjusted kilo 8.00 • —

Nicotinamide hydrochloride, dms. frt adjusted kilo 8.00 • —

Nicotine sulfate 40% dealers, 50 lb dms frt alld lb 1.20 • —
40% manufacturers 500-lb dms. frt alld lb 1.05 • —

Nicotinic amide USP (see Nicotinamide)

Niger seed, bgs lb 10¼ —

Nikethamide cbys lb 5.00 • —

Nitric acid, 36° Be., cbys., c.l., works E 100 lbs 5.75 • —
cbys., l.c.l. works E 100 lbs 6.05 6.85
38° Be., cbys., c.l., works E. 100 lbs. 6.25 • —
cbys., l.c.l., works E. 100 lbs 6.55 7.35
40° Be., chys., c.l., works, E 100 lbs 6.75 • —
cbys., l.c.l., works, E. 100 lbs 7.05 7.85
42° Be., cbys., c.l., works, E. 100 lbs. 7.25 • —
cbys. l.c.l. works E 100 lbs 7.55 8.35
58.5 to 68%, HNO_3, tanks, works, 100% basis 100 lbs. 3.90 • —
94½ to 95½% HNO_3, tanks, works, 100% basis 100 lbs 4.90 • —
CP, NF, consumer, cbys., extra, c.l., works lb. .18½ • —
cbys. extra, l.c.l., works. lb. .20 • —
5-pint bots., extra cs., c.l., same basis lb. .22½ • —
5-pint bots. extra cs., l.c.l., same basis lb. .24 • .26

MONTROSE
CHEMICAL COMPANY

100 LISTER AVENUE
NEWARK, NEW JERSEY

Dimethyl Isophthalate

Trimethyl Borate — Trimethoxy Boroxine

T.C.P. — Tricresyl Phosphate

Mono Cresyl Diphenyl Phosphate

D.D.T. — Dichloro Diphenyl Trichloroethane

Ethyl Silicate 28% — 40%

D.D.V.P. — Dimethyl Dichloro Vinyl Phosphate
(Minimum 95% Purity)

EXCLUSIVE SALES AGENTS

R. W. GREEFF & CO., INC.
10 ROCKEFELLER PLAZA, NEW YORK 20, N. Y.
1721 TRIBUNE TOWER, CHICAGO, ILLINOIS

4-Nitro-2-Aminophenol—Pink Root

4-Nitro-2-aminophenol, tech., paste, dms., frt. alld lb. .99 - —
m-Nitroaniline, cryst., dms., frt. alld lb. 1.15 - —
Paste, dms., frt. alld. 100% basis. lb. 1.10 - —
o-Nitroaniline, flaked dms. t.l., frt. alld lb. .49 - —
dms., l.t.l. frt. alld lb. .51 - —
o-Nitroaniline orange toner, kegs, lb. 1.35 - —
p-Nitroaniline, dms. frt. alld lb. .445 - —
o-Nitroanisole, tech., tanks frt. alld. lb. .36 - —
p-Nitroanisole, tech., solid, dms., frt. alld lb. .72 - —
Nitrobenzene, dbl. dist., dms., c.l., frt. alld lb. .13 - —
dms., l.c.l. frt. alld lb. .14 - —
tanks, frt. alld lb. .11 - —
p-Nitrobenzoic acid, dms., c.l., works lb. .63 - —
dms., l.c.l., works lb. .64 - —
Nitrocellulose, ester-soluble, 30-35 cps., ¼, ½ ¾, 5-6, 15-20, 30-40 60-80, 125-175 seconds. bbls. c.l., works lb. .37½ - —
bbls., l.c.l., same basis lb .33½ 40½
18-20, cps., bbls. c.l., same basis lb. .39½ —
bbls. l.c.l. same basis lb. 40½ 42½
250-400, 600-1,000 seconds, bbls., l.c.l., same basis lb. .43 46
Spirit soluble, 30-35 cps., ¼, ½ seconds, bbls, c.l., same basis lb. .43 - —
bbls., l.c.l. same basis lb. 44 - 46
5-6 cps., 40-60 seconds bbls., c.l., same basis lb. .42 - —
bbls l.c.l. same basis lb 43 45
Denatured alcohol used in the manufacture of nitrocellulose is charged extra Drums extra but returnable.
o-Nitrochlorobenzene dms. c.l. frt. alld lb .15 - —
dms., l.c.l. same basis lb .16 - —
tanks, same basis lb 13 - —
p-Nitrochlorobenzene, dms. lb. 26 .27
2-Nitro-p-cresol tech. dms., dlvd. lb 88 - —
Nitroethane dms., c.l., dlvd. E lb .25 - —
dms., l.c.l. dlvd E lb 26½ - —
tanks dlvd E lb. 22½ - —
Nitroethane prices West of Rockies are 1c higher
Nitrogen solutions, tanks, frt. equald., N unit. 1.28 - —
Nitrogen tetroxide, indust., tankcars, f.o.b. Hopewell, Va lb. .065 - —
Clys., t.l., min. 5 tons, same basis lb. .07½ - —
Cyls., l.c.l., l.t.l., same basis lb. .15 - —
Nitrogenous process tankage, bulk, works unit-ton 4.50 Nom
Nitrogenous sewage sludge bulk f.o.b. Chicago, works unit ton 3.10 .50
Nitromethane dms. t.l. dlvd E lb .25 —
dms. l.t.l. dlvd E lb. 2.½ - —
Nitromethane prices West of Rockies are 1c higher
α-Nitronaphthalene bbls. frt. alld. lb. .31 - —
o-Nitrophenol, dms., works, frt. equald lb. .94 - —
p-Nitrophenol, dms., c.l., frt alld. lb. .45 - —
dms l.c.l., frt alld lb .47 - —
2-Nitropropane dms. c.l., frt. alld. E of Rockies lb. 23½ - —
dms l.c.l., same basis lb. 25 - —
tanks same basis lb. 21 - —
2-Nitropropane dms. c.l. frt. alld. E of Rockies lb .18½ - —
dms l.c.l. same basis lb .20 - —
tanks same basis lb. .16 - —
Nitropropane prices West of Rockies are 1c per lb higher.
m-Nitrotoluene, tech. dms. frt alld lb. .50 - —
o-Nitrotoluene dms. c.l. frt. alld. lb .15 - —
dms. l.c.l. frt. alld. lb. .16 - —
tanks frt alld lb .13 - —
p-Nitrotoluene, tech., cast, dms., works lb. .27½ - —
dms., l.c.l. works lb. .28 - —
flake, dms., c.l., t.l., works lb. .27½ - —
dms., l.c.l., works lz. .28 - —
m-Nitro-p-toluidine dms lb 1.25 - —
Nonylphenol, dms. c.l., frt, alld. lb. .22 - —
dms. l.c.l. frt. alld lb. .23 - —
tanks frt alld lb. .19½ - —
Nonylphenol prices on shipments to Western States are 2c. higher.
Nutmegs, East Indian, whole bgs. lb. 1.36 - —
West Indian, bgs lb. 1.45 - —
Nutmeg oil, USP, dist., East Indian, cns lb 9.50 12.75
West Indian, cns lb 9.50 12.75
Nux vomica, bls lb. .20 —
Powd., bbls., bxs lb .20 .22

O

Ocher (see Iron oxide yellow nat.).
Ocotea cymbarum oil, dms lb. .48 - .53
Octane, indust., tanks, Bayonne, N.J gal. .20 - —
Borger Tex gal. .15¾ - —
1-Octanol, tech. dms. c.l., dlvd., Zone 1 lb. .43½ - —
dms., l.c.l., dlvd. Zone 1 lb. .45½ - —
tanks, dlvd. Zone 1 lb. .41 - —
Octyl alcohol, perfumers grade, bots lb 1.60 3.25
Octyl alcohol, tech. (see 1-Octanol, tech.)
tert-Octylamine, dms., c.l., t.l., f.o.b. works lb .54½ - —
dms., l.c.l., same basis lb. .55 - —
Octyl phenol, bgs., c.l., works lb. .22 - —
bgs., l.c.l., works lb. .22½ - —
tanks, works lb .21 - —
Octyl phenol in dms. 1½c higher

OILS
Oil quotations are listed individually. For example, prices on Oil, coconut, may be found in the C's under Coconut oil.

Oiticica oil, liq., dms. lb. .20¾ - .21¼
tanks lb .18¾ - —
Oleic acid, dbl.-dist. (white), dms. lb. .17½ - .20
tanks lb. .15 - —
S. d., dms lb. .16¼ - .18¾
tanks lb. .13¾ - —
Oleo oil, extra, dms. lb. .13 - .13½
Oleostearine, cms. lb. .12 - .12¼
Oleum (see Sulfuric acid, fuming)
Olibanum gum siftings cs. lb .13 .20
Tears, cs. lb .22 .30
Olibanum oil, bots. lb 5.00 - 7.65
Extra fine, bots lb 8.00 9.50
Olive oil, edible, dms, spot, duty-paid gal. 2.30 - 2.50
Olivine, crude, works ton 12.00 - —
20 mesh, works ton.15.00 - —
100 mesh works ton.20.00 - —
Opium gum, USP, cns., 25-lbs., f.o.b. works oz.19.20 - —
gran., cns., 50 lbs., same basis. oz.21.65 - —
powd., cns., 50 lbs., same basis. oz.21.65 - —
Orange oil, expressed USP, Brazilian cns. dms lb No stocks.
California, cns., dms lb. .70 - .90
Florida, cns., dms. lb. .50 - .60
Messina, cns lb 3.25 5.00
West Indian, bitter cns. dms lb 2.50 3.25
Sweet, dist., cns. dms lb. .60 - —
Orange peel, bitter, Haitian, bls lb. .18 - .20
Sweet lb. .28 - .30
Origanum oil, Spanish cns lb 1.80 2.30

ORANGE PIGMENTS
Orange pigment quotations are listed individually. For example, prices on Orange, chrome, may be found in the C's under Chrome orange.

Orris root, florentine, bls. lb 55 —
powd. bbls. bxs. lb 65 - —
Verona, bls. lb 35 - —
powd. bbls. bxs lb 45 - —
Orthoanisidine (see o-Anisidine).
Orthochlorobenzaldehyde (see o-Chlorobenzaldehyde).
Orthochloroaniline (see o-Chloroaniline).
Orthochlorobenzoic acid (see o-Chlorobenzoic acid).
Orthochloroparanitroaniline (see 2-Chloro-4-nitroaniline)
Orthochlorophenol (see o-Chlorophenol)
Orthocresol (see o-Cresol)
Orthocresotinic acid (see 2,3-Creosotic acid)
Orthodichlorobenzene (see o-Dichlorobenzene)
Orthonitroaniline (see o-Nitroaniline)
Orthonitrochlorobenzene (see o-Nitrochlorobenzene)
Orthonitroparachlorophenol (see 2-Nitro-4-Chlorophenol).
Orthonitrophenol (see o-Nitrophenol)
Orthonitrotoluene (see o-Nitrotoluene).
Orthophenetidine (see o-Phenetidine)
Orthophenylphenol (see o-Phenyl phenol).
Ortho-tertiary amylphenol (see o-tert-Amylphenol)
Orthotolidine (see o-Tolidine base)
Orthotoluidine (see o-Toluidine)
Ouabain, USP bots., gram 3.00 4.00
Ouricury wax, crude, bgs lb. .60 - .62
Refd., pure, bgs. lb. .68 - .69
Oxalic acid, bgs. dms. c.l., works. lb. .18 .18½
bgs. dms., 10,000-lb lots, works. lb. 18¼ .18¾
bgs. dms. smaller lots, works. lb. 19¼ .19¾
b-Oxynaphthoic acid, pigment manufacture, dms., frt. alld. lb. .912 - —
Dyestuff manufacture, dms., same basis lb. 1.03 - 1.14
Oxyquinolin sulfate, cns. 100 lb lots, works. lb 4.75 5.00
cns., smaller lots, works lb 4.92 5.17

P

Palm oil, clarif., dms. lb. .1465- .1565
tanks lo. .12 - —
Palm oil acid, dist., dms. lb 15¾ 19¼
tanks lb 13¾ 14¼
Palmarosa oil, cns lb. 4.45 - 6.00
Papain, powd., bots lb. 5.50 10.00
Papaverine hydrochloride nat. or syn. USP cns. 25-oz to 100 oz lots oz 5.00 —
cns., smaller lots oz 5.05 5.20
Papaverine sulfate, nat. or syn., USP, cns., oz 7.10 7.35
Paprika, Bulgarian bgs lb .34 - .35
Hungarian, bgs. lb .32 - —
Spanish, bgs. lb .50 - —
Yugoslavian, bgs. lb .34 - —
Para-aminobenzoic acid (see p-Aminobenzoic acid)
Parachlorobenzoic acid (see p-Chlorobenzoic acid)
Paramethylphenylcinchonic acid (see Neocinchophen)
Paranitrobenzoic acid (see p-Nitrobenzoic acid)
Paratoluidinemetasulfonic acid (see p-Toluidine m-sulfonic acid)
Para-aminophenol (see p-Aminophenol).
Parachloro-orthonitroaniline (see 4-Chloro-2-nitroaniline)
Para-anisidin (see p-Ansidine).
Parachloraniline (see p-Chloraniline).
Parachlorobenzaldehyde (see p-Chlorobenzaldehyde)
Parachlorophenol (see p-Chlorophenol).
Paracresol (see p-Cresol)
Paradibromobenzene (see p-Dibromobenzene).
Paradichlorobenzene (see p-Dichlorobenzene).
Para toner, red, bbls lb. 1.36 - —
Chlorinated, kgs. lb 1.35 - —
Paraffin, crude, scale, white, 123°-127°F. ASTM tanks, refy. lb. .0655- —
Paraffin, fully refd., 122°-124°F, ASTM., tanks, refy lb. .0765- —
125°-127°F. ASTM. tanks, refy. lb. .0785- —
130°-132°F. ASTM. tanks, refy. lb. .0765- —
132°-134°F., ASTM tanks, refy lb. .0765- —
135°-137°F., ASTM, tanks, refy lb. .0765- —
AMP temperatures are an arbitrary 3°F. higher than ASTM
Paraffin oil, pale, 100-110 vis., at 100°F., tanks, east coast refy gal. .14 - —
Paraffin wax (see Paraffin)
Paraformaldehyde, 91% flake, bgs., c.l., frt. alld lb. .10 - —
bgs., l.c.l., frt. alld lb. .12 - .13
91%, powd., bgs., c.l., ex whse. lb. .1715- —
bgs., l.c.l., ex whse lb. .1865- —
USP-X, fib dms., c.l. lb. .19 - —
fib. dms., 1,000-lb. lots lb. .20 - —
fib. dms., smaller lots lb. .21½ - —
Paraldehyde, tech., 98%, 55-gal. dms., t.l., dlvd lb. .14 - —
55-gal. dms., l.c.l., dlvd lb. .15 - —
tanks, dlvd lb. .11½ - —
Paranitroaniline (see p-Nitroaniline).
Paranitrochlorobenzene (see p-Nitrochlorobenzene)
Paranitrotoluene (see p-Nitrotoluene.
Paranitrophenol (see p-Nitrophenol).
Paraphenetidine (see p-Phenetidine).
Paraphenylenediamine (see p-Phenylenediamine)
Paraphenylphenol (see p-Phenylphenol)
Para-tertiary amylphenol (see p-tert-Amylphenol)
Para-tertiary butylphenol (see p-tert-Butylphenol)
Parathion, ethyl, dms. frt. alld. lb .84 - —
Parathion prices 2c per lb higher in West.
Paratoluenesulfonamide (see p-Toluenesulfonamide).
Paris green, dealers, 100 lb. dms., frt. alld lb. .45 - —
Passion flower herb, bls. lb. .45 - .50
Patchouli oil, imp., cns. lb. 5.10 - 5.25
Peach kernel oil, USP (see Apricot kernel oil)
Peacock blue, fugitive, 100% color strength, 250-lb. bbls., dlvd. E. of Rockies lb. 1.00 - —
Peacock blue price 1c. higher W. of Rockies.
Peanut meal, 45% old process, bgs., f.o.b., mills ton.64.00 Nom.
Peanut oil, crude, tanks, f.o.b. mills. lb. .15¼ - —
Refd., dms. lb. .20½ - .20¾
tanks lb. .18½ - —
Pectin, dom. NF, citrus, powd. bbls lb 2.05 - 2.06
Dom., tech., powd., 150 jelly grade, bbls lb. 1.28 - —
Imp., Danish, bbls. ex whse lb. 1.28 - —
Pelargonic acid, dms., c.l., dlvd lb. .27½ - —
ton lots, same basis lb. .23½ - —
tanks, same basis lb. .25 - —
Penicillin potassium cryst., bulk, 1,000,000 units. .021 - .024
Penicillin procaine cryst., bulk, 1,000,000 units. .021 - .024
Pennyroyal oil USP, imported, cns. lb. 2.25 - 3.10
Pentachlorophenol, bgs., c.l., t.l., works, frt equald lb. .21 - —
bgs., l.c.l., same basis lb. 22½ - .29
Pentachlorophenol in dms 1c higher.
Pentaerythritol, tech., bgs., c.l., dlvd lb. .31 - —
bgs., l.c.l., dlvd lb. .32 - —
Pentaerythritol, di-and tri-isomers (see Dipentaerythritol and Tripentaerythritol)
Pentane, indust., tanks, f.o.b. refy, gal. .14 - —
Pentobarbital, dms., 100 lbs. or more lb 3.00 - —
Pepper black, Malabar, bgs. lb. .63 - —
Lampong, bgs. lb. .63 - —
Red, Funtuas, bgs lb. .32 - —
Japanese, Hontoka, bgs. lb. .37½ - —
Santaka, bgs. lb. 31½ - —
Sudanese, bgs. lb. 36 - —
White, Muntok, bgs lb. 1.10 - —
Peppermint leaves, dom. USP, bls., dms lb .70 .75
Imp., USP., bls lb .85 —
Peppermint oil, nat., dms lb. 4.00 - 4.60
Redist., USP, dms. lb. 4.25 - 5.25
Perchloroethylene, dms. c.l. or t.l., dlvd lb. .13½ —
dms., l.c.l., dlvd lb. .15¼ - —
tanks, dlvd lb. .11¾ - —
tanktruck 1,000 gal min dlvd. lb. .12¼ - —
Peri acid, dry, bbls. frt. alld lb 1.60 - —
Peride, bbls frt alld lb 1.55 - —
Peru balsam, dms lb. 1.25 - 1.80
Persic oil, USP (see Apricot kernel oil).
Petitgrain oil, South American, cns. dms lb. 2.50 - 3.25
Petrolatum, cream, dms. c.l. refy lb .08125- —
dms., l.c.l. dlvd. lb .10125-.11375
tanks refy lb .05875 —
Extra amber, dms., c.l., refy. lb. .07125- —
dms. l.c.l. dlvd lb .09125-.10375
tanks, refy lb .04875 —
Lily white, dms. c.l. refy lb .08625 —
dms. l.c.l. dlvd. lb .10625 12
tanks, refy lb .06735 —
USP, snow white, dms. c.l. refy lb .09125- —
dms. l.c.l. dlvd lb .11125- 125
tanks, refy lb .06875 —
USP, soft yellow, dms., c.l., refy, lb. .07125- —
dms., l.c.l., dlvd lb .095 10375
tanks, refy lb .04875 —
Petroleum pitch (see Asphalt, petroleum)

PETROLEUM PRODUCTS
Petroleum product quotations are listed individually. For example, prices on Petroleum, mineral spirits, may be found in the M's under Mineral spirits, petroleum.

Petroleum sulfonate, oil soluble, 60-62% sulfonic content, non-ret. dms. c.l., works lb. .16½ .18¾
non-ret. dms. l.c.l. works lb. .17½ .19
tanks, works lb. 14½ .17
50-55%, sulfuric content, non-ret. dms., c.l., works lb. .16 - —
non-ret. dms. l.c.l. works lb .17 - —
tanks, works lb. .13 - —
o-Phenetidine, dms. c.l. frt alld. E lb. .91 - —
dms., l.c.l., same basis lb. .93 - —
p-Phenetidine, dms., c.l., frt. alld. lb. 1.05 - —
dms., same basis lb 1.08 - —
Phenobarbitol, USP, dms., 100-lbs., frt. alld lb. 3.25 - —
Phenobarbital-Sodium (see sodium phenobarbital)
Phenol, 90-92% (cresol 8-10%) non-ret. dms., frt alld. E of Rockies lb. .16¾ —
non-ret. dms. l.c.l. same basis. lb. .17¾ —
tanks same basis lb. .14¾ —
Phenol, 82-84% (cresol 16-18%) non-ret. dms., c.l., same basis. lb. .16½ —
non ret. dms. l.c.l. same basis. lb. .17½ —
tanks, same basis lb. .14½ —
30°C, or above, tar dist., non-ret. dms., c.l., same basis lb. .18 - —
non-ret dms. l.c.l. same basis. lb. .19 - —
tanks, same basis lb. .16 - —
USP, syn., dms., c.l., t.l., frt. alld lb. .18½ —
dms., same basis lb. .20½ —
tanks, same basis lb. .16½ —
Phenolphthalein, USP or yellow, 250-lb dm. 2,000 lbs. frt. alld. lb. 1.30 - —
250-lb. dm., same basis lb. 1.35 - —
Phenothiazine drench fib dms., t.l., dlvd lb. .44 - —
fib. dms. t.l.l., same basis lb. .47 - —
NF, fib. dms., t.l., same basis lb. .43 - —
fib dms. t.l.l., same basis lb. .46 - —
Phenyl acetate, dms., 100-lb. lots, works lb .50 - —
Phenyl salicylate (see Salol).
Phenylacetaldehyde, soln., 50%, bots lb. 2.35 - —
100%, bots. lb 4.00 - 4.65
Phenylacetic acid, pure, cryst. cns. lb 1.25 1.75
dl-Phenylalanine, dms. works lb.27.00 -37.50
l-Phenyl-3-carbethoxy pyrazolone-5, fib. dms. 200-lb lots dlvd E. lb 3.45 - —
fib. dms., smaller lots, dlvd E. lb 3.80 - —
N-Phenyldiethanolamine dms., c.l., dlvd E lb .41 - —
dms., l.c.l., dlvd. E lb. .42½ - —
tanks, dlvd. E lb. .38½ - —
m-Phenylenediamine, dms. frt alld. lb. 1.10 - —
o-Phenylenediamine, comi., fib. dms., 100 to 1,000 lbs., works lb. 1.70 - 1.80
p-Phenylenediamine, tech., dms., works lb. 1.55 - —
Phenylethanolamine, dms., c.l., works lb. .75½ - —
dms. l.c.l. same basis lb. .77 - —
Phenylethyl acetate bots. lb. 1.25 - 1.40
2-Phenylethyl alcohol, extra, dms. lb 1.14 1.50
Standard, dms. lb 1.10 1.60
b-Phenylethylamine, dms., 20,000 lbs. or more frt alld lb. 1.50 - —
dms., smaller lots, frt. alld lb. 1.70 - 1.85
Phenylethylphenyl acetate bots. lb 4.00 4.25
Phenylglyconic acid (see Mendelic acid).
Phenylhydrazine, 97%, 450-lb dms. lb. 1.45 - —
1-Phenyl-3-methyl pyrazolone-5, fib. dms., 250-lb lots, dlvd E lb 1.80 - —
fib. dms. smaller lots, dlvd E lb 2.10 - —
o-Phenylphenol, dms., t.c.l., works. lb. 48 50
p-Phenylphenol, bgs. c.l., works lb. 38½ - —
bgs., t.c.l., works lb. 43 —
Philippine copal gum, pale, chips, bgs lb .23¾ .26
nubs, bgs. lb. 33¼ .37
seeds, bgs lb 20 Nom.
sorts, bgs. lb. .20 - .24
Phloroglucinol, comi., fib. dms., works lb 6.40 —
CP, bots., works lb 17.75 - —
Tech. fib dms., works lb.10.45 - —
Phloxin red toner (see Eosin red toner)
Phosgene, ret cyls. works lb 15½ - —
Phosphate, defluorinated (see under D)
Phosphate rock, Curacao, Atlantic ports New Orleans ton 48.00 - —
Phosphate rock, Florida, land pebble, run-of-mine, washed, dried, unground 66-68%, b.p.l., bulk, c.l. mines. short-ton. 4.698 - —
68-70%, b.p.l., bulk, c.l., same basis short-ton. 5.148 - —
70-72% b.p.l., bulk, c.l. same basis short ton. 5.728 - —
74-75%, b.p.l., bulk, c.l., same basis short ton. 6.628 - —
76-77% b.p.l. c.l. bulk. same basis short ton. 7.518 - —
Above Florida prices are based on fuel oil at $2.37 per bbl. and labor at $1.59.
Phosphoric acid, food grade, 75%, cbys., c.l., works, E., frt. equald 100 lbs. 7.00 - —
cbys., l.c.l., same basis. 100 lbs 7.25 - 7.75
tanks, t.w., works 100 lbs. 5.60 - —
80% cbys., c.l., frt. equald 100 lbs 7.85 - —
cbys., l.c.l., works 100 lbs. 8.10 9.35
tanks, t.w., works 100 lbs 6.00 - —
NF, 85% cbys., c.l., works 100 lbs. 8.50 - —
cbys., l.c.l., works 100 lbs. 8.75 9.00
tanks, t.w., works 100 lbs. 6.65 - —
Phosphorus, amorph., red, dms., t.l. works lb. .55 - —
dms. smaller lots, works lb. .56 - .57
white (yellow), solid dms., c.l., works, frt. equald lb. .20 - .20½
dms., l.c.l., works, frt. equald lb. .21½ - —
tanks, works, frt. equald lb. .19 - —
Phosphorus oxychloride, dms., c.l., works lb. .14 - —
dms., l.c.l., works lb. .15 - —
tanks, works lb. .12½ - —
Phosphorus pentasulfide, powd., dms., c.l. works lb. .13½ - —
dms. l.c.l., works lb. .14½ - .15¼
Solid, dms., c.l., works lb. .11½ - —
dms. l.c.l., works lb. .12½ .13¼
Phosphorus pentoxide, dms., c.l., works lb. .1375- .1475
dms., l.c.l., works lb. .1475- .1675
Phosphorus sesquisulfide, dms., cs., c.l., works lb. .38 - —
dms., l.c.l., works lb. .39 - .40
Phosphorus trichloride, dms., c.l., works lb. .14 - —
dms., l.c.l., works lb. .15 - —
tanks, works lb. .12½ - —
Phthalic anhydride, bgs. c.l., works, frt. equald lb. .17 - .19
bgs., l.c.l., same basis lb. .18 - .20
tanks, same basis lb. .16½ - .18¼
Phthalimide, 97-98% dms., frt. alld lb. .65 - —
Phthalocyanine blue, full strength, bbls dlvd. E of Rockies lb 2.90 - —
Resinated, bbls., same basis lb 2.75 - —
Water dispersable, bbls., same basis lb. 1.52 - —
Phthalocyanine blue prices 1c. higher W of Rockies.
Phthalocyanine green toner, bbls., works lb 3.35 - —
Resinated, bbls lb 3.00 - —
Water dispersable, bbls lb 1.71 - —
Phthalocyanine green prices 1c. higher W of Rockies
Phthalylsulfacetamide, fib dms., 1,000 lb lots or more lb 5.00 - —
NF fib dms lb 5.20 - —
α-Picoline, dms. c.l., works, frt. equald lb. .43 - .43¼
dms., l.c.l., works, frt. equald lb. 44 - —
tanks, same basis lb. .415 - .422
b-Picoline, 98% dms., t.l., works. lb 1.05 - —
dms., l.c.l., same basis lb. 1.15 - —
tanks, same basis lb. .95 - —
b,g-Picoline, 5°C. dms., c.l., works. lb. .32½ - —
dms., l.c.l., works lb. .33 - —
g-Picoline, dms., f.o.b., works lb 1.60 - —
tanks, t.l. same basis lb. 1.50 - —
Picric acid, NF bbls lb. .85 - —
Tech. bbls lb 44 - —
Pigment green B, kgs lb. 1.50 - —
Pilocarpine hydrochloride, USP, bots oz. 5.25 - —
Pilocarpine nitrate USP bots. vials. oz. 5.15 - —
Pimento, Jamaican, bgs lb. .68 - —
Mexican, bgs lb. .57 - —
Pimento berry oil, NF, dms. lb 3.75 9.25
Pimento leaf oil, crude, cns lb 2.10 - 2.48
Pine oil, dest.-dist., cms., l.c.l. works lb. .15 - —
dms. l.c.l. ex whse New York. lb. .173 - —
Steam-dist., dms., ex whse., New York lb. .185 - —
dms., dlvd lb. .188 - —
Pineneedle oil, Siberian (see Abies Siberica oil)
Pinetar oil, comi. dms., c.l., works. lb. .0561- —
dms., l.c.l., works lb. .0634- —
dms., c.l., ex whse New York. lb. .0745- —
tanks, works lb. .046 - —
NF, rectified, dms., incl., l.c.l., works, South lb. .40 - —
dms., l.c.l., ex whse, New York lb. .41½ - —
Refd., dms., incl., l.c.l. works lb. .35 - —
dms. incl l.c.l., ex whse New York lb .36½ - —
Pink root, bls. lb. 1.75 - —

Piperazine, anhyd., dms., c.l., , frt. alld.	lb.	1.80	—
dms., l.c.l., same basis	lb.	1.85	—
Piperazine citrate, 36%, dms., 1,000 lbs. or more, frt. alld	lb.	1.15	—
Piperazine dihydrochloride, 51%, dms., 1,000 lbs. or more, frt. alld	lb.	1.23	—
Piperazine hexahydrate 44%, dms., 1,000 lbs. or more, frt. alld	lb.	.86	—
dms., 200-900 lbs., frt. alld	lb.	.89	—
Piperazine phosphate, 42% dms., 1,000 lbs. or more frt. alld	lb.	1.08	—
Piperidine, dist., 98% min., dms., frt. equald	lb.	2.60	—
Piperonyl butoxide dms. dlvd E	lb	4.50	5.05

PITCHES

Pitch quotations are listed individually. For example, prices on Pitch, soybean, may be found in the S's under Soybean pitch.

Plaster of Paris (see Gypsum).			
Platinum metal, works	oz.	82.00	-85.00
Pleurisy root, bls	lb	.45	.50
Podophyllum resin, NF, dms.	lb.	12.50	—
Poke root, bls	lb	.19	.22
Polymyxin, bots., bulk, 50 billion units or more 1,000,000 units.		.52	—
bulk, bots., 25-50 billion units. 1,000,000 units.		.54	—
bulk, bots., 1-25 billion units. 1,000,000 units.		.56	—
Polyoxyethylene sorbitan monostearate, dms 20,000-lb. lots, works	lb.	.42	—
dms., 10,000-20,000-lb lots, works	lb.	.44	—
dms., smaller lots, works	lb.	.47	.49
Polyoxyethylene sorbitan tristearate, dms., 20,000 lb lots, works	lb.	.42	—
dms., 10,000-20,000-lb. lots, works	lb.	.44	—
dms., smaller lots, works	lb.	.47	.49
Pontianak copal gum, chips, bgs.	lb.	.25	—
Nubs, bgs	lb	.37	.40
Poppy seed, Argentine, bgs.	lb	No stocks.	
Dutch, bgs.	lb.	.22	—
Danish, bgs.	lb.	.20½	—
Polish, bgs	lb.	.20	—
Turkish, bgs.	lb.	.17½	—
Potash, caustic liq. 45% basis, dms., c.l., works 100 lbs		4.25	—
dms., l.c.l., same basis 100 lbs		5.05	—
tanks, same basis 100 lbs		3.70	—
reg., flake, 88-92%, dms., c.l., same basis 100 lbs.		9.15	—
Potash, reg., flake, 88-92%, dms., l.c.l., same basis 100 lbs.		10.20	—
solid, 88-92%, dms., c.l., works, 100 lbs.		8.70	—
dms. l.c.l. works 100 lbs		9.75	—
Potassium acetate, NF 200-lb. dm., f.o.b. works E	lb.	.31	—
Potassium bicarbonate USP, gran. dms	lb.	.22	—
USP, powd., dms.	lb.	.24	—
Potassium bichromate, gran., bgs., c.l., l.l., works	lb.	.18	—
bgs., l.c.l., works	lb.	.18½	.19¾
Potassium bichromate in dms., ¾c. higher.			
Potassium bitartrate, NF, gran., powd., 100-lb. bgs., c.l., frt. equald	lb.	.37	—
100-lb. bgs., 5,000 lbs. 1 shipt., same basis	lb.	.38	—
100-lb bgs., smaller lots, same basis	lb.	.40	—
Potassium borohydride powd., dms., works	lb.	16.00	-22.00
Pelletized postassium borohydride $1.25 per lb higher in 1,000-lb. lots.			
Potassium bromate, dms., 1,000-lb. lots or more, works	lb.	.50	—
dms., smaller lots, works	lb.	.52	.62
Potassium bromide, USP, gran., bbls., kgs	lb.	.39	.40
Potassium carbonate, dom., NF, gran., bbls, dms	lb.	.20	—
Dom., tech. powd., bbls., dms	lb.	.21	.22
Dom., calcinated, bgs., c.l., works, 100 lbs.		8.50	—
bgs., l.c.l., same basis 100 lbs.		9.55	—
Dom., hydrated, 83-85%, bgs., c.l., works 100 lbs.		7.10	—
bgs., l.c.l., works 100 lbs.		8.15	—
Potassium chlorate, cryst., dms., c.l., works	lb.	.12¼	—
dms., l.c.l., works	lb.	.13½	.14½
Powd., dms., c.l., works	lb.	.12¾	—
dms., l.c.l., works	lb.	.14	.15
works	lb	.12¼	—
NF, cryst., dms., 2,000 lbs. or more, works	lb.	.16¾	—
NF, gran. 25-lb metal dms	lb.	.36	—
NF, powd., dms., 2,000 lbs. or more, works	lb.	.17¼	—
Potassium chloride indust., 99.9% KCL, bulk, c.l works	ton	29.00	—
bgs., c.l., works	ton	33.50	—
99.3% KCL bulk, c.l., works	ton	27.00	—
bgs. c.l works	ton	31.50	—
USP, cryst., dms.	lb.	.20	.22
USP, gran., dms.	lb.	.21	.23
USP, powd., dms.	lb.	.24	.26
Potassium chloride, agricultural (see Potassium muriate)			
Potassium chromate tech., dms., works	lb.	.50	.51
Potassium citrate, NF, gran., 250-lb. dm., f.o.b. works E	lb.	.43	—
powd., 250-lb dms. same basis,	lb.	.46	—
Potassium cyanide, dms 20,000-lb. lots or more, works	lb.	.42½	—
dms., 2,000-19,999 lb lots, works,	lb.	.43	—
dms., smaller lots, works	lb.	.44	.44½
Potassium dichromate (see Potassium bichromate)			
Potassium ferricyanide, dms., ton lots, works	lb.	.50	—
dms., smaller lots works	lb.	.65	—
Potassium ferrocyanide, dms., ton lots	lb.	.24½	—
dms., smaller lots	lb.	.29	—
Potassium fluoborate fib dms., c.l., works	lb.	.30	—
fib dms. l.c.l. works	lb	.31	—
Potassium fluoride, dms. works	lb.	.37	.38
Potassium gluconate, 100-lb. dm., f.o.b works E	lb.	1.67	—
Potassium guaiacol sulfonate, NF, dms	lb	2.10	2.30
Potassium hydroxide tech (see Potash caustic)			
Potassium hydroxide, USP, pellets, 100-lb dms. 1 to 100-dm. lots	lb.	.33½	.38
Potassium hypophosphite, NF, fib. dms., 1,000-lb lots	lb.	1.38	—
Potassium iodide USP cryst., gran., or powd., 250-lb dm., f.o.b. works	lb.	1.40	—
Potassium manure salt, 22% K2O, bulk, c.l., works unit-ton.		.17	.1765
Potassium metabisulfite, gran., dms.	lb.	.16	—
Powd., dms.	lb.	.27	—
Potassium muriate, standard, bulk, c.l., works unit-ton.		.34½	.36½
bagged, 60% minimum K2O same basis	ton.	25.60	-26.80
Gran., bulk, c.l., works unit-ton.		.35	.37
Potassium muriate, bagged, 60% minimum K2O, same basis.	ton.	25.90	-27.10

Inside prices apply to material contracted for prior to July 1, 1959.

Outside prices apply to material contracted for after that date but also for delivery during the current month.

Potassium nitrate, NF, cryst., bbls., 20-ton lots	100 lbs.	17.00	—
bbls., smaller lots	100 lbs.	18.00	-19.00
NF, gran., bgs., 20-ton lots.	100 lbs.	9.50	—
bgs., smaller lots	100 lbs.	11.00	-12.00
NF, powd., bgs., 20-ton lots.	100 lbs.	10.50	—
bgs., smaller lots	100 lbs.	12.00	-13.00
Potassium oxalate, neutral, tech., fine gran., powd., 300-lb. dm., f.o.b. works E	lb.	.32	—
Potassium pentaborate, gran., dms., c.l., works	ton	219.50	—
dms., ton lots, ex whse.	ton.	311.00	—
dms., smaller lots, ex whse	ton.	316.00	—
Powdered potassium pentaborate $10 per ton higher.			
Potassium perchlorate, dms., c.l., works	lb.	.18½	—
dms., l.c.l., works	lb.	.19	.20
Potassium permanganate, coml., kgs., works	lb.	.25	.33
USP, dms., works	lb.	.29	.35
Potassium persulfate, dms., c.l., works	lb.	.17½	—
dms., l.c.l., works	lb.	.18	.21
Potassium pyrophosphate, tetrabasic, dms., works	lb.	.15½	.18½
Potassium prussiate red (see Potassium ferro-cyanide).			
Potassium prussiate yellow (see Potassium ferro-cyanide).			
Potassium silicate, electrical grade, 30° Be, 1:2.0, dms., c.l., works	100 lbs.	6.50	—
dms., l.c.l., 5 dm. lots or more, works	100 lbs.	7.25	- 7.65
tanks, works	100 lbs.	6.15	—
40.5° Be, 1:2.1, dms., c.l., works.	100 lbs.	5.95	—
dms., l.c.l., 5 dm. lots or more works	100 lbs	6.70	—
tanks, works	100 lbs	5.60	—
Glass grade, bgs., c.l., works	100 lbs.	17.30	-18.15
bgs., l.c.l., works	100 lbs.	17.80	—
Soln., 29° Be, 1:2.5, dms., c.l., works	100 lbs.	4.95	—
dms. l.c.l., 5-dm. lots or more, works	100 lbs	5.70	—
tanks, works	100 lbs	4.60	—
Potassium silicofluoride, bgs., works	lb	.09½	10
Potassium silicofluoride in drums, 0.4c. per lb higher.			
Potassium stannate, dms., frt alld. E	lb.	.780	- .853
Potassium sulfate, agricultural, bulk, c.l., works	unit-ton.	.67½	- .69½

Inside price applies to tonnage contracted for prior to July 1, 1959.

Outside price applies to tonnage contracted for after that date but also for delivery during the current month.

Potassium sulfate, NF VII, cryst., dms	lb	31	33
NF VII, gran., dms	lb	18½	—
NF VII, powd., dms	lb	.16	17
Potassium sulfocyanate, NF, cryst. (see Potassium thiocyanate)			
Potassium thiocyanate, NF, cryst., dms., works	lb	95	98
Tech., dms., works	lb	77	79
Potassium titanate, ctns, c.l. works.	lb.	16¼	—
ctns., 5-ton lots, works	lb.	16½	—
ctns., 1-ton lots or less, works	lb	16¾	—
Potassium-magnesium sulfate, basis 40%K2SO, and 18% MgO. bulk, works, base price	ton	13.45	—
bulk, works, July forward	ton	14.00	—
Potassium-sodium tartrate, NF, gran. or powd., 250-lb dms., c.l., f.o.b works E	lb.	.42½	—
250-lb. dms., 5,000-lb. lots, same basis	lb.	.43	—
250-lb. dms. same basis	lb.	.43½	—
Potassium-titanium fluoride, fib, dms., works	lb.	.39	.40
Potassium-zirconium fluoride, fib, dms., c.l., works	lb	.50	—
fib dms. l.c.l. works	lb	52½	.55
Pregnenolone, bots.	gram.	No prices	
Pregnenolone acetate, bots.	gram.	No prices.	
Procaine hydrochloride, USP, dms., 1,000-lb. lots, frt. alld	lb.	2.60	—
dms. 100-500 lb lots	lb	2.95	3.15
Progesterone, USP, bots.	gram	No prices.	
Progesterone acetate, bots.	gram.	No prices.	

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Northern California's Want Ad Leader for 72 Straight Years
More Want Ads & Lines than all other newspapers combined
SUNDAY, NOV. 29, 1959
FINAL EDITION
GLASS TECHNICIAN
ONE MILLION DOLLARS TO BE SPENT ON SALES EXPANSION
JOB SEEKERS
SALESMEN
'Yellow Pages' Advertising
INDUSTRIAL ACCOUNTANT
GENERAL ELECTRIC
GOVERNMENT CONTRACTS ACCOUNTANT
Production Management Trainees
We're looking for a DEPENDABLE SOURCE OF SUPPLY FOR HIGHLY PURE PHENOL

If the above advertisement could have been written by you—then look no further. Just get in touch with Oronite and talk over your phenol requirements.

Oronite has always been willing to invest to meet its customers' growing demands. Proof of this is the fact that Oronite's phenol plant capacity has been increased almost 50% since this plant began production just five years ago.

So if your process requires a highly pure phenol, or if you want to be assured of a most dependable source of supply — now and in the years ahead — just contact any Oronite office and discuss your needs.

ORONITE CHEMICAL COMPANY
A CALIFORNIA CHEMICAL COMPANY SUBSIDIARY

EXECUTIVE OFFICES • 200 Bush Street, San Francisco 20, California

SALES OFFICES • New York, Boston, Wilmington, Chicago, Cincinnati, Cleveland, Houston, Los Angeles, San Francisco, Seattle

Foreign Affiliate: California Chemical International, Inc., San Francisco, Geneva, Panama

Propenyl Guaethol—Senega Root

Propenyl guaethol, dms ..... lb. 24.30 - 27.00
b-Propriolactone, dms., c.l., t.l., f.o.b. works ..... lb. .89 - —
dms., l.c.l., l.t.l., same basis ..... lb. .90 - —
tanks, same basis ..... lb. .87 - —
Propionic acid syn. pure dms., c.l., works ..... lb 2¾
dms., l.c.l., works ..... lb. .24¾-
tanks, works ..... lb. .20¾-
n-Propyl acetate, dms., c.l., dlvd. ..... lb 14¾-
dms., l.c.l., dlvd. ..... lb .16¼-
tanks, dlvd ..... lb .12¼-
n-Propyl alcohol, dms., c.l., dlvd. ..... lb. .14 -
dms., l.c.l., dlvd. ..... lb. .15½-
tanks, dlvd ..... lb. .11½-
n-Propyl gallate, dms., 100 to 2,000-lb lots, works ..... lb 3.90 4.40
n-Propyl-p-hydroxybenzoate, USP, dms ..... lb 2.30* 2.40
Propyl thiouracil, bots., 50 kilo lots or more ..... kilo 55 00 —
bots., smaller lots ..... kilo 55 10 -55.30
n-Propylamine, dms., c.l., dlvd. ..... lb. 1.24 - —
dms., l.c.l., same basis ..... lb 1.255 - —
a-Propylene dichloride, consumers' dms., c.l., dlvd. E ..... lb. .0845- —
dms., l.c.l., same basis ..... lb. .0995- —
tanks, same basis ..... lb. .07 - —
Propylene dichloride prices in West 1c. higher, same basis.
Propylene glycol, USP, dms., c.l., dlvd. E ..... lb. .15 - —
dms., l.c.l., same basis ..... lb. .16¾- —
tanks, same basis ..... lb. .12½- —
Propylene glycol methyl ether dms., dlvd. E ..... lb. .17 - —
USP, dms., c.l., dlvd. E ..... lb. .17 - —
dms., l.c.l., same basis ..... lb. .18¾- —
tanks, same basis ..... lb. .14½- —
Propylene glycol methyl ether, dms., c.l., dlvd ..... lb. .20 - —
dms., l.c.l., same basis ..... lb. .21 - —
tanks, same basis ..... lb. .18½- —
Propylene oxide, dms., c.l., dlvd. E. ..... lb. .17 - —
dms., l.c.l., dlvd. E. ..... lb. .18½- —
tanks, dlvd. E. ..... lb. .14½- —
Psyllium seed, black, bgs. ..... lb. .30 - .35
Blonde bgs. ..... lb. .18 - .20
Husks, bgs. ..... lb. .42 - .45
Pumice, dom., grd., coarse to fine, 0, ½, 1, 1½, 2, 3, bgs., ton lots lb. .03¾- .04¼
bgs., smaller lots ..... lb. .03⅞- —
Imp., Italian, silk-screen, coarse, bgs., ton lots lb. .03¼- —
fine, bgs ton lots lb .04 - —
sun dried, coarse, bgs ton 60.00 - —
fine, bgs. ..... ton 60.00 -70.00
Pumpkin seed, bgs. ..... lb. .25 - .26
Pyrethrins, syn (see Allethrin).
Pyrethrum flowers, fine grd., 0.9% pyrethrins, bgs., ton, works lb. .50 - —
Powd., 1.3% pyrethrins, bgs., ton, works lb. .71 - —
Pyrethrum liquid, 20/1 basis (2 grams pyrethrins per 100cc odorless base), dms., works gal. 9.60 - 9.80
Pyrethrum liquid, 100/1 basis (10 grams pyrethrine per 100cc odorless base), dms., works, gal. 45.90 -46.90
Pyrethrum oleoresin, dewaxed, 20%, dms., works. lb. 11.00 -11.35
purif., 20%, dms., works ..... lb. 11.00 -11.35
Pyridine, denat., dms. c.l., works and frt equald gal. 2.77 - —
dms l.c.l., same basis ..... gal. 2.80 - —
Refd., 2°, non-ret. dms., l.c.l., same basis lb. .70 - —
tanks, same basis ..... lb. .65 - —
Pyridoxine hydrochloride, USP, 500-gram bots., dms., f.o.b. works, kilo. 175.00 - —
Pyrites, Canadian, 48-50% S, mines, long ton 5.00 - 6.00
Pyrocatechol (see Catechol)
Pyrogallic acid, NF (see Pyrogallol).
Pyrogallic acid, tech., bbls., 100-lbs., f.o.b. works ..... lb. 3.50 - —
Pyrogallol, NF, 100 lb. dms. ..... lb 3.50 - —
Pyroxylin, USP bots. ..... lb 9.50 - —

Q

Quassia chips ..... lb. .10 - —
Quicksilver (see Mercury metal)
Quince seed, bgs ..... lb. 1.15 - 1.50
Quinidine sulfate, USP, cns .. oz. .74½- .77
Quinine, NF, cns., 100-oz. lots .. oz. .34 Nom.
Quinine bisulfate, USP cns .... oz. .27½- .29
Quinine hydrochloride, cns ..... oz. .23 - .26
Quinine sulfate, USP, cns ..... oz. .23 - —
Quinoline, dms., c.l., frt. equald lb .50¾- —
dms., l.c.l., same basis ..... lb. .51¼- —
tanks, same basis ..... lb. .50 - —

R

R salt, paste, dms. frt. alld., 100% basis ..... lb. .88 - —
Powd., frt. alld. 100% basis ..... lb. 1.08 - —
Rapeseed oil, dms ..... lb. .14¾- .15
tanks ..... lb. .12¾- —
Rare earth chloride, 46%, dms., dlvd lb. .25 - —
Rare earth, oxalate, NF, 45-50%, bgs., works lb. 1.15 - —
Rauwolfia serpentina root, powd., bbls. dms lb. 1.00 - 1.20
Red carmine No. 40 (see Carmine).
Red oil (see Oleic acid)

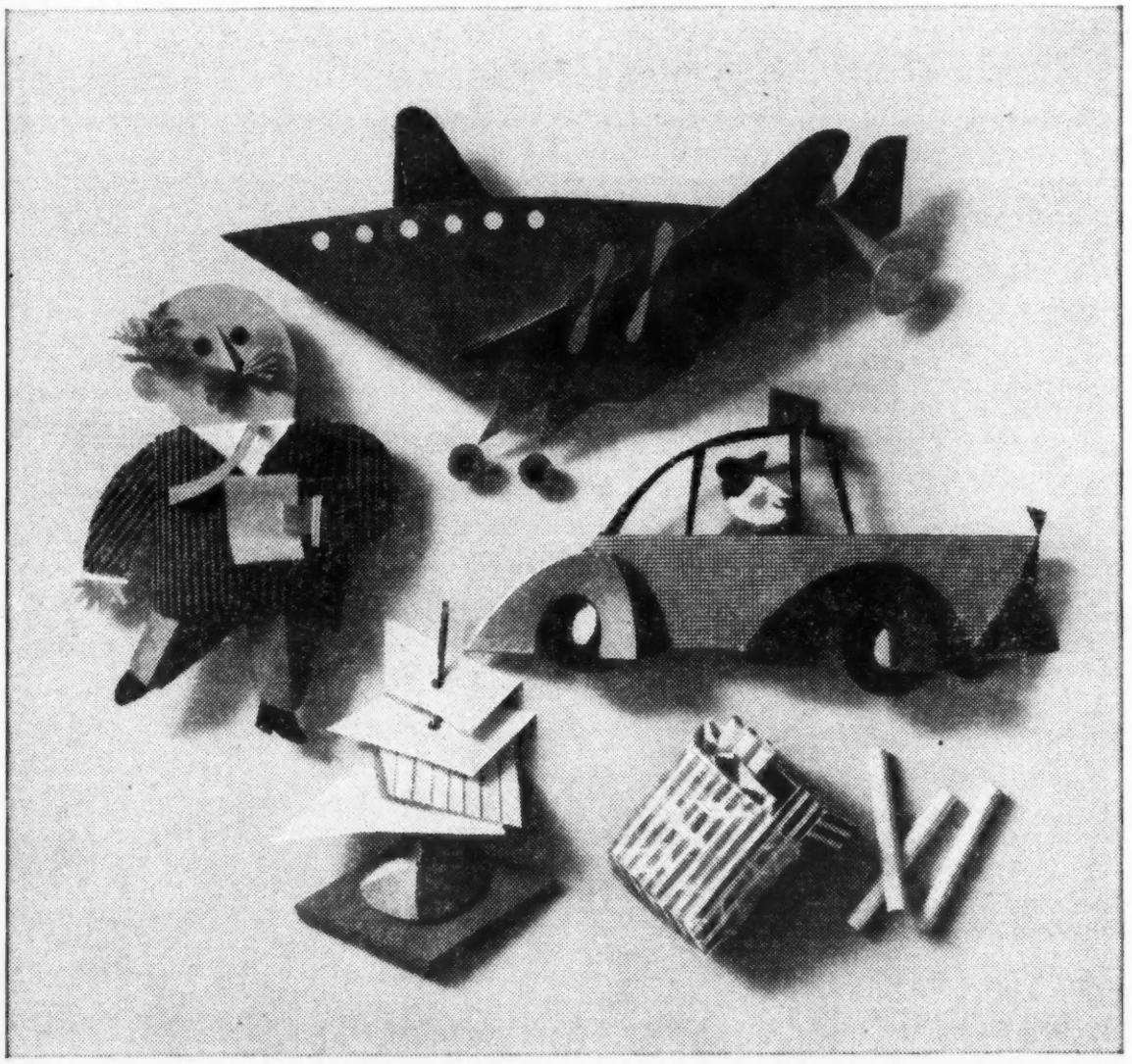
RED PIGMENTS

Red pigment quotations are listed individually. For example, prices on Red, lithol toner, may be found in the L's under Lithol red toner.

Red precipitate (see Mercuric oxide, red)
Reserpine, cryst., bots ... gram 1.25 - —
Resorcinol, tech grade, dms., c.l., works, frt. equald lb. .77¼- —
dms., l.c.l., same basis ..... lb .79¼- —
USP, powd., dms., works ..... lb. 2.95 - —
Resorcinol monoacetate, NF, dms. lb 2.50 - —
Rhatany root, bgs. ..... lb. .14 - .16
Rhodamine red toner, molybdated, PMA, kgs., works lb. 6.00 - —
Tungstated, PTMA, works, kgs lb 6.60 - —
Rhodinol, 5-lb. cans ..... lb. 42.00 -51.00
Synthetic ..... lb. 14.00 -16.00
Rhubarb root, India whole, bgs lb. .25 - —
powd., bgs. ..... lb. .35 - —
Riboflavin, USP, fib. dms., kilo or more, dlvd kilo. 36.00 - —
Riboflavin, USP, readily soluble, bots., dlvd kilo. 130.00 - —
Riboflavin, 5-phosphate-sodium fib. dms., kilo or more dlvd. kilo. 104.50 - —
Rice bran oil, clarified, dms. l.c.l. lb. .14½- .15
tanks, dlvd. E ..... lb. .12½- —
Ricinoleic acid (see Castor oil acids split)
Rochelle salt (see Potassium sodium tartrate).
Roofing pitch (see Coaltar pitch roofing)
Rose oil, nat., Bulgarian bots oz 72 00 —
Turkish, bots oz 55 00 -58.00
Rosemary oil, Spanish, NF, cns., dms lb .97 1.20
Spanish, tech., cns., dms. ..... lb. .50 - 1.20
Rosin, gum and wood (see Naval Stores in Protective Coatings market)
Rotenone, fib. dms., works, unit-lb. .12 - —
Resin, 25-45% fib dms. works, unit-lb. .12 - —
Rottenstone, bgs., 5-ton lots, ex-whse lb. .03¾- —
bgs. ton lots same basis lb. .04¼- —
Rubber solvent, petroleum, 115°F-245°F b.r., tankcars, New Jersey and New York gal. .19 - —
Group 3 ..... gal. .13875- —
Houston, Texas ..... gal. .155 - —
Rue oil, bots. ..... lb 2.75 3.00
Rutin, NF, fib dms., 10 kilo lots kilo. 13.00 - —
fib. dms., 5 kilo lots ..... kilo. 13.50- —
fib. dms., 1 kilo ..... kilo. 14.00 - —
Ryania, 100%, powd., bgs., c.l., works lb. .22 - —
bgs., l.c.l., same basis .. lb .24 - —

S

S acid, bbls., works ..... lb. 3.25 - —
Sabadilla seed activated, ground with lime, bbls lb. .42 - .44
Saccharin, calcium, fib dms., 1,000-lb lots, works lb 2.50 - —
USP, gran., soluble dms., 1,000-lb. lots lb. 1.40 - —
dms., smaller lots ..... lb. 1.50 - —
USP, powd., soluble, insoluble, dms., 1,000-lb. lots lb. 1.45 - —
dms., smaller lots ..... lb. 1.55 - —
USP, powd., insoluble, dms., 1,000-lb. lots lb. 1.43 - —
dms., smaller lots ..... lb. 1.53 - —
Safflower oil, dms., New York lb. .1785- .1830
tanks, Atl. Coast ..... lb. .1585- —
Saffron, Mancha Superior, tins lb. 19.50 - —
Safrol, dms. ..... lb. .70 - —
Sage, Dalmatian, bgs. ..... lb. .40 - —
Greek, cns. ..... lb. .16 - —
Italian, cns. ..... lb. .18 - —
Sage oil, clary, bots. ..... lb. 20.00 -30.00
Dalmatian, cns. ..... lb. 2.85 - 3.25
Spanish, cns. ..... lb. 1.25 - 1.75
Sal soda (see Soda sal).
Salicylaldehyde, dms., c.l., t.l., f.o.b. plant, frt. equald lb 1.23 - —
dms., l.c.l., same basis ..... lb. 1.25 - —
Salicylamide, 100-lb dms ..... lb. 1.05 - —
Salicylic acid, crude, fib dms., c.l., t.l., frt alld lb. .37¼- —
fib. dms. l.c.l., frt. alld. on 100 lbs or more lb. .38½- —
Sublimed, tech., fib dms., c.l., t.l. dlvd lb. .39¼- —
fib. dms., l.c.l. dlvd lb. .43½- —
USP, cryst., 200-lb. fib. dms., 1,000 lbs. or more lb. .50½- —
200-lb fib. dms., less than 1,000 lbs lb. .53½- —
Salicylic acid, 100-lb. fib. dms., 1,000-lbs. or more lb. .52½- —
100-lb. fib. dms., less than 1,000 lbs. lb. .55½- —
USP, powd., 100-lb. fib. dms., 1,000 lbs. or more lb. .57½- —
100-lb. fib. dms., less than 1,000 lbs lb. .60½- —
Salol, NF, gran., bbls. kgs lb. 1.20 - —
Powdered salol, 25c per lb higher.
Salt, rock, paper bgs., c.l., 100 lbs 1.09 - —
Salt, table vacuum, common, fine, paper bgs. c.l 100 lbs 1.34 - —
Saltcake, dom., bulk, works, 100% Na_2SO_4 basis ton. 28.00 - —
Saltpeter (see Potassium nitrate)
Sandalwood, E. Indian, chips, bgs. lb. .65 - .66
powd. fib. dms ..... lb 75 - 76
Sandalwood oil, cns ..... lb. 16.25 -17.50
Sarcosine, tech., tanks, f.o.b., works, frt. equald lb. 1.03 - —
Sardine oil, crude, tanks, Pac. coast. lb. No stocks
Sassafras oil, artif., dms. ..... lb. .43 - —
Nat., dom., dms ..... lb. 1.45 - 2.15
Savory oil, cns ..... lb. 4.75 - —
Schaeffer's salt, paste, dms., frt. alld. 100% basis lb. .85 - —
Powd., bgs., frt. alld. 100% basis. lb. .95 - —
Scopolamine hydrobromide, USP, bots. oz. 13.00 - —
Sebacic acid, CP, bgs., c.l., works, lb. .69¼- —
bgs., l.c.l., works ..... lb. .71¼- —
Purified, bgs., c.l., works .... lb. .65½- —
bgs., l.c.l., works ..... lb. .67½- —
Seidlitz mixture, fib. dms. 5,000 lb. lots lb. .30½- —
fib. dms., smaller lots lb. .31 - .33
Selenium, powd., 99½%, dms., dlvd lb 7.00 - —
Senega root, bls. ..... lb. 3.00 - 3.25



YOU USE CAUSTIC SODA THROUGHOUT YOUR BUSY DAY

Caustic soda—technically, sodium hydroxide—is a basic chemical used in so many ways by so many industries that it plays an important role in every business executive's daily round. In fact, it probably has already affected your day in many ways. Surprised? Here's the evidence.

For one thing, the suit you put on this morning owes its neat appearance in part to caustic soda. Whatever your choice in fabric—wool, synthetic, or blend—caustic soda was probably used someplace along the way in processing the fiber. And, of course, the same applies to the rest of your clothing.

Much of the paper that is so vital to your working day—in every form, including desk calendars, letterheads, business papers, and of course, order forms and invoices—was processed with caustic soda.

Caustic helps you keep your appointments on time, too. It is used in refining petroleum to produce fuel for cars, taxis, and planes.

Columbia-Southern, a leading producer of caustic soda, supplies users in many industries. Columbia-Southern also produces chlorine, soda ash, and related chemicals, all of them indispensible "building materials" in our advanced economy.

COLUMBIA-SOUTHERN CHEMICAL CORPORATION

A Subsidiary of Pittsburgh Plate Glass Company • One Gateway Center, Pittsburgh 22, Pennsylvania

Anhydrous Ammonia, Barium Chemicals, Benzene Hexachloride, Calcium Chloride, Calcium Hypochlorite (Pittchlor®, Pittabs®), Carbon Tetrachloride, Caustic Potash, Caustic Soda, Chlorine, Chlorinated Benzenes, Chloro IPC, Chrome Chemicals, Hydrogen Peroxide, Muriatic Acid, Pacific Crystals, Perchlorethylene, Rubber Pigments (Calcene®, Hi-Sil®, Silene®), Soda Ash, Sodium Bicarbonate, Sodium Sulfate, Titanium Tetrachloride, Trichlorethylene

Senna leaves, Alexandria, whole and half, bls. lb. .20 - .22
siftings lb. .16 - —
Senna leaves, Tinnevelly, No. 1, bls. lb. .22 - —
No. 2, bls. lb. .18 - —
No. 3, bls. lb. .14 - —
pods, bls. lb. .23 - —
powd., bbls., bxs. lb. .17 - —
Serpentaria root, bls. lb. 6.50 - —
Sesame oil, USP, dms. lb. .38 - .39
Sesame seed, Colombian, bgs. lb. .15½ - —
Lebanese, hulled, bgs. lb. .19 - —
Nicaraguan, hulled, bgs. lb. .21½ - —
nat., bgs. lb. .14 - —
Salvadorian, nat., bgs. lb. .16 - —
Shellac, bleached, bonedry, bgs., 1,500-lb. lots lb. .46 - —
bbls., 1,500-lb. lots lb. .47 - —
kgs., 1,500-lb. lots lb. .48 - —
Bonedry shellac prices for less than 1,500-lb. lots 1c. per lb. higher for all packages.
Shellac, bleached, refd., bgs., 1,500-lb. lots lb. .56 - —
bbls., 1,500-lb. lots lb. .57 - —
kgs., 1,500-lb. lots lb. .58 - —
Shellac, orange, lemon No. 1, bgs., 10-bg. lots lb. .37 - .39
lemon No. 2, bgs., 10-bg. lots, lb. .34 - .37
superfine, bgs., 10-bg. lots lb. .32 - .34
Shellac in 1 to 10-bg. lots 1c. per lb more.
Shingle stain oil, tar distillate, dms., c.l., works gal. .37 - —
dms., t.c.l., works gal. .40 - —
tanks, works gal. .23 - —
Sienna pigment, burnt, paper bgs., c.l., works lb. .06½ - .18½
paper bgs., t.c.l., works lb. .06¾ - .17¾
Raw, paper bgs., c.l., works lb. .06¾ - .16¾
paper bgs., t.c.l., works lb. .07 - .17
Silica, amorph., dry-grd., 325 mesh, bgs., c.l., works ton 25.00 - —
bgs., t.c.l., works, ex whse. ton 45.00 - 55.00
Hard-quartz, 99½%, 325 mesh, bgs. c.l., works ton 20.00 - —
bgs. t.c.l., works ton 25.00 - —
99½%, 140 mesh, bgs., c.l., works ton 15.00 - —
bgs., t.c.l., works ton 20.00 - —
Silicon tetrachloride, tech., dms., c.l., works lb. .18 - —
dms., t.c.l., works lb. .22 - .30½
tanks, works lb. .17 - —
Silver bullion, ingots, cs Troy oz. .91⅛ - —
Silver cyanide bots. 1,000-oz lots, oz. .94¾ - —
bots., 500-oz. lots oz. .95¼ - —
bots., 100-oz. lots oz. .96¼ - —
Silver nitrate, CP, cryst., bots., 1,000 to 3,000-oz., f.o.b. works, oz. .87¼ - —
bots., 250-500 oz., same basis, oz. .87¾ - —
USP granular silver nitrate 4c. per oz. higher.
Silver proteinate, mild, USP, bots., dms., 1,000-oz. lots oz. 1.15 - —
Strong, NF, bots., dms., 1,000-oz. lots oz. 1.10 - —
Snakeroot oil, Canada, cns lb. 40.00 - 43.00
Soapbark, crushed, bls lb. .30 - .35
Powd., bls. lb. .35 - .40
Whole, bls. lb. .20 - .25
Soda ash, dense, 58%, paper bgs., c.l., works 100 lbs. 1.90 - —
paper bgs., t.c.l., stock pts., 100-lbs. 3.00 - 4.77
bulk, c.l., works 100 lbs. 1.60 - —
Light, 58%, paper bgs., c.l., works 100 lbs. 1.85 - —
paper bgs., t.c.l., stock pts. 100 lbs. 3.95 - 4.72
bulk, c.l., works 100 lbs. 1.55 - —
Soda, caustic, flake, 76%, dms., c.l., works, frt. equald 100 lbs. 5.20 - —
liq. 50%, sellers' tanks, works, dry basis 100 lbs. 2.90 - —
50%, rayon type, sellers' tanks, works, dry basis 100 lbs. 2.90 - 3.00
73% sellers' tanks, works, dry basis 100 lbs. 3.00 - —
73%, rayon type, sellers' tanks, works, dry basis, 100 lbs. 3.00 - 3.10
solid, 76%, dms., c.l., works, 100 lbs. 4.80 - —
Soda, sal, conc., bgs., c.l., works, 100 lbs. 2.50 - —
bgs., smaller lots, works 100 lbs. 2.80 - —
Sodium acetate, anhyd., bgs., c.l., dlvd. E lb. .14½ - —
NF, 60% gran., dms. c.l., works, lb. .15½ - —
dms., t.c.l., works lb. .17½ - —
Sodium alginate, NF, white powd., dom., 300 lbs. or more lb. 1.02 - —
Sodium p-aminosalicylate, dms., 100-lb. lots or more frt. adjusted lb. 1.90 - —
Sodium antimoniate, bgs., c.l. dlvd. E lb. .25½ - —
bgs., t.c.l., dlvd. E lb. .27 - —
Sodium arsenate, 60% arsenic pentoxide, dms., any quantity, f.o.b. works lb. .40 - —
Sodium arsenite, 90% pink powder, 75% arsenious oxide, dealers, dms., ton lots or more, works lb. .27½ - —
dms., less than ton lots, works lb. .18 - .19
Sodium ascorbate, dms., 25-50 kilo dms., f.o.b. works kilo. 10.00 - —
10-kilo dm., same basis kilo. 10.35 - —
5-kilo dm., same basis kilo. 10.75 - —
1-kilo bot., same basis kilo. 11.00 - —
Sodium benzoate, tech., dms., c.l., t.l., frt. alld lb. .35 - —
dms., t.c.l., same basis lb. .39 - —
USP, dms., c.l., t.l., frt. alld lb. .38 - —
dms., ton lots, same basis lb. .43 - —
dms., 1,000-lb lots, same basis, lb. .45 - —
Sodium bicarbonate, USP, gran., bgs., c.l., works 100 lbs. 2.95 - —
bgs., t.c.l., works 100 lbs. 3.85 - —
USP, powd., bgs., c.l., works, 100 lbs. 2.55 - —
bgs., t.c.l., works 100 lbs. 3.45 - —
Sodium bichromate, gran., bgs., c.l. t.l., works lb. .13 - —
bgs., t.c.l., works lb. .13½ - .14¼
Sodium bichromate in dms. ¾c. per lb. higher
Sodium bifluoride, bbls., c.l., works, frt. equald lb. .19½ - —
bbls., t.c.l., same basis lb. .2025 - —
Sodium bisulfate, bulk, c.l., works, 100 lbs. 2.00 - —
dms., c.l., frt. equald 100 lbs. 3.00 - 3.60
dms., t.c.l., frt. equald 100 lbs. 3.50 - 4.10
Sodium bisulfite, anhyd., bgs., c.l., works 100 lbs. 5.00 - —
bgs., t.c.l., works 100 lbs. 5.45 - —
Soln., 35° bbls., c.l., works 100 lbs. 1.70 - —
bbls., t.c.l., works 100 lbs. 2.20 - —
Sodium borate (see Borax)
Sodium borohydride, powd., dms., c.l., works lb. 19.90 - —
dms., t.c.l., works lb. 33.00 - 40.00
Sodium borohydride, stabilized water soln., 12% $NaBH_4$, 100% basis, dms., works lb. 15.00 - —
Pelletized sodium borohydride $1 per lb. higher in 1,000-lb. lots.

Sodium bromide, USP, gran., dms., works lb. .40 - —
Sodium carbonate, cryst., monohydrated (see Soda, sal)
Sodium carbonate, monohydrated, bgs., c.l., works 100 lbs. 3.10 - —
bgs., t.c.l., works 100 lbs. 3.50 - —
Sodium carboxymethyl cellulose (see CMC).
Sodium chlorate, cryst., 350-lb. dms., c.l., works lb. .09 - —
dms., t.c.l., works lb. .09½ - .10½
Sodium chlorate in 100-lb. dms., only, ¼c. per lb. higher.
Sodium chloride, tech. (see Salt).
Sodium chloride, USP, gran., bgs. lb. .05 - —
Sodium chlorite, tech., dms., c.l., works lb. .58 - —
dms., 20-dm. lots or more, works, lb. .66 - —
dms., smaller lots, works lb. .70 - .73
Sodium chloroacetate, tech., dms., c.l., works lb. .27 - —
dms., t.c.l., works lb. .28 - —
Sodium chromate, anhyd., fib. dms., c.l., t.l., works lb. .14¾ - —
fib. dms., t.c.l., works lb. .15¼ - .16½
Sodium chromate, tetrahydrate, bgs., c.l., t.l., works lb. .1015 - —
bgs., t.c.l. lb. .1065 - .1190
Sodium citrate, anhyd., 200-lb. dm., f.o.b. works E lb. .62 - —
NF VIII, gran., bgs., c.l., same basis lb. .26 - —
USP XIV, gran., bgs., c.l., same basis lb. .29 - —
Sodium citrate, USP powd prices ½c. higher.
Sodium cyanate, dms., 1,000-lb. lots, works lb. .85 - —
dms., smaller lots, works lb. .90 - 1.10

Sodium cyanide, flake, 96-98%, dms., c.l. or 20,000-lb. lots lb. .193 - —
dms., over 1,000-lb. lots lb. .203 - —
dms., 100-lb. to 1,000-lb lots lb. .213 - —
Gran. sodium cyanide 1c higher.
Sodium cyclamate, 100-lb dm., f.o.b. works lb. 1.95 - —
Sodium diacetate anhyd., 39-41% acetic acid, dms., c.l., works lb. .18 - —
250-lb. dms., t.c.l., works lb. .18¾ - —
Tech., 33-35% acetic acid, dms., t.c.l., works lb. .15 - —
250-lb. dms., t.c.l., works lb. .15¼ - —
Sodium dimethyl dithiocarbamate, 40% soln. dms. c.l., t.l., frt. alld., 100% basis lb. .42 - —
dms., t.c.l., t.t.l., same basis lb. .47 - .52
tanks, same basis lb. .38 - —
Sodium ferrocyanide, bgs., 10-ton lots lb. .13½ - —
bgs., smaller lots lb. .14¾ - —
Sodium fluoride, white, 97%, fib. dms., c.l., works, frt. equald lb. .1390 - —
fib. dms., t.c.l., works, frt equald lb. .1465 - —
Sodium formate, bgs., c.l., works, 100 lbs. 7.05 - —
bgs., t.c.l., ex whse. 100 lbs. 6.65 - —
Sodium gentisate, 100-lb fib. dms. lb 5.50 - —
Sodium gluconate, refd., 250-lb. dm., f.o.b. works E lb. .84 - —
Tech. bgs., c.l., t.l., same basis lb. .34 - —

Sodium hydride, 50% soln. in oil, dms., works lb. 1.25 - 2.50
25% soln. in oil, dms. 50 lbs or less, f.o.b shipping point lb 2.20 - —
dms., 50-99 lbs., same basis lb 1.77 - —
dms., 100-999 lbs., same basis lb 1.20 - —
dms., 1,000 lbs or more same basis lb .95 - —
Sodium hydrosulfide (see Sodium sulfhydrate).
Sodium hydrosulfite dms. c.l., frt. alld lb. .23½ - —
dms., t.c.l., frt. alld. lb. .25¾ - —
Sodium hydroxide, NF pellets 100-lb dms. 1 to 100 dm lots, lb 23½ - 28
Sodium hydroxide tech (see Soda, caustic).
Sodium hypophosphite, NF, dms., 1,000-lb lots lb .97 - —
Sodium hyposulfite (see Sodium thiosulfate).
Sodium iodide, USP, 300-lb. dm., f.o.b. works lb. 1.98 - —
Sodium lauryl sulfate, dms., c.l., dlvd lb. .20½ - —
dms., t.t.l., dlvd lb. .21½ - —
tanks, dlvd. lb. .19½ - —
Sodium lignin sulfonate, bgs., c.l., works 100 lbs 4.25 - 6.50
t.c.l., bgs., works 100 lbs 4.40 - 7.00
Sodium metabisulfite (see Sodium bisulfite).

in catalysts

in paints

in ceramics

in plastics

in inks

VANCORAM CHEMICALS

in synthetic fibers

in petroleum products

in glass

in mordants...

In these and many other applications Vancoram Vanadium Chemicals are growing rapidly in importance, because of their dependability and versatility.

You Can Depend On...

VANCORAM AMMONIUM METAVANADATE
(Technical Grade)
Analysis: NH_4VO_3—99% min.

VANCORAM VANADIUM PENTOXIDE
(Technical Grade—Air-dried)
Analysis: V_2O_5—83/86%
(Technical Grade—Fused Flake)
Analysis: V_2O_5—88/92%
(Purified Grade)
Analysis: V_2O_5—99.6% approx.
(C. P. Grade)
Analysis: V_2O_5—99.9% approx.

VANCORAM SODIUM ORTHOVANADATE
(Technical Grade—$Na_3VO_4 \times H_2O$)
Typical analysis: V_2O_5—approx. 26.75%
Na_2O—approx. 22.60%

VANCORAM SODIUM METAVANADATE
(Technical Grade)
Typical analysis: V_2O_5—61.40%
Na_2O—20.90%

VANADIUM CHLORIDE—Syrupy—C.P.
Analysis: $V_2O_2Cl_4 \cdot 5H_2O$—approx. 82.00%

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Producers of alloys, metals and chemicals

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VANADIUM CORPORATION OF AMERICA
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Sodium Metaborate Octahydrate—Solvent Naphtha

Sodium metaborate octahydrate, gran., bgs., c.l., works ton 210.00 - —
bgs., ton lots, ex whse 100 lbs 8.00 - —
bgs., smaller lots, ex whse, 100 lbs 9.25 - 11.25
Tetrahydrate, bgs., c.l., works ton 210 - —
bgs., ton lots ex whse 100 lbs 13.93 - —
bgs., smaller lots, ex whse, 100 lbs 15.18 - 17.18
Sodium metallic bricks c.l works, lb. .21 - —
Fused, 18,000-lb lots or more, works lb. 19½ - —
tanks, works lb .17 - —
Sodium metalinate bbls, frt alld, lb 62 - —
Sodium metaphosphate, bgs., c.l., f.o.b shipping pt 100 lbs 11 10 - —
bgs., l.c.l., same basis 100 lbs 11 85 - —
dms., c.l., same basis 100 lbs 11 70 - —
dms., l.c.l., same basis 100 lbs 12 45 - —
Sodium metasilicate anhyd., bgs., c.l., works 100 lbs 5 70 - —
bgs, 6,000-19,900 lb lots works 100 lbs 6.05 - —
dms, c.l., works 100 lbs 6.20 - —
dms, l.c.l. works 100 lbs 6.55 - —
Sodium metasilicate pentahydrate, bgs, c.l. works 100 lbs 4.45 - —
bgs, l.c.l. works 100 lbs 4.80 - 6.75
dms, c.l. works 100 lbs 4.95 - —
dms., l.c.l., works 100 lbs 5.30 - 7.25
Sodium molybdate anhyd., dms., works, frt. equald lb. .92 - .99
Cryst., dms., works, frt. alld lb. .74 - .76

Sodium monoglutamate (see Monosodium glutamate).
Sodium monohydrate (see Sodium carbonate, monohydrated).
Sodium naphthionate, bbls., lb. 70 - —
Sodium nitrate, dom., crude, bgs., c.l. works ton 48.00 - —
bulk, c.l., works ton 44 00 - —
Imp., crude, 100-lb. bgs., c.l., Atl., Gulf, Pac. whse ton 48.00 - —
bulk, c.l., same basis ton 44 00 - —
Sodium nitrite, USP, bbls., c.l., works, frt. equald 100 lbs 9 00 - —
bbls., l.c.l., same basis 100 lbs 11 00 - —
Sodium orthosilicate, conc., dms., c.l., works 100 lbs 6.70 - —
dms, l.c.l., works 100 lbs 7 05 - 7.65
Hydrated, flake, bbls., c.l., works, 100 lbs 5.65 - —
bbls, l.c.l., works 100 lbs 7 60 - 7.90
Sodium oxalate, 88%, bgs., works 100 lbs 12.35 - —
99%, bgs., works 100 lbs 15.40 - —
Sodium para-aminobenzoate (see Sodium p-aminobenzoate).
Sodium para-aminosalicylate (see Sodium p-aminosalicylate)
Sodium pentachlorophenate, tri-quets, dms, c.l. works, frt. equald lb. 26 - —
dms., l.c.l. same basis lb .27½ - .34
Sodium pentachlorophenate, pellets, dms., c.l., same basis lb. .26 - —
dms, c.l., same basis lb 27½ - .34
Powd., dms., c.l. same basis lb .25 - —
dms., l.c.l., same basis lb. .26½ - .33

Sodium pentobarbital, USP, dms., 100 lbs. or more lb. 6.00 - —
Sodium perborate, NF, tech., bgs., c.l., works lb. .18½ - —
bgs., l.c.l., works lb. .19 - .21
Sodium peroxide, dms., c.l., t.l., divd. E. of Miss lb. .21½ - —
dms., l.c.l., same basis lb. .23 - .23½
Sodium phenobarbital, USP, 100-lb. dms lb 3.75 - —
Sodium phenolsulfonate, USP IX, gran., dms lb. .52 - .53
NF, powd., dms lb. .55 - .56
Sodium phosphate, dibasic, anhyd., bgs., c.l., frt. equald, 100 lbs 7.95 - —
bgs., l.c.l. same basis 100 lbs. 8.35 - 9.40
Dibasic, duohydrate, bgs., c.l., frt. equald 100 lbs. 7.60 - —
bgs, l.c.l. same basis 100 lbs 8.10 - —
USP dried, powd. bgs., dms., works lb .19 - .20½
Monobasic, anhyd., bgs., c.l., frt. equald 100 lbs. 9.00 - —
bgs., l.c.l. same basis 100 lbs 9.40 - 10.00
Sodium phosphate, tribasic, anhyd., bgs., c.l., frt. equald, 100 lbs. 9.00 - —
bgs., l.c.l. frt. equald 100 lbs 9 45 - 10.05
cryst., bgs c.l., t.l. frt equald 100 lbs 4.60 - —
bgs, l.c.l., frt equald 100 lbs 5.00 - 5.75
Sodium phosphate in dms 60c to 80c higher than bgs
Sodium picramate, tech paste, dms., f.o.b., works, frt equald lb. .90 - —
Sodium prussiate, yellow (see Sodium ferrocyanide)
Sodium pyrophosphate acid, bgs., c.l., works, frt. equald, 100 lbs. 11 10 - —
bgs., l.c.l., same basis 100 lbs. 11.85 - 12.35

Sodium pyrophosphate, ferric, dms., c.l., t.l., works lb. .36 - —
dms., l.c.l., works lb. .37 - .38
Sodium pyrophosphate tetrabasic, anhyd., bgs., c.l., works, frt equald 100 lbs 7.81 - —
bgs., l.c.l., same basis 100 lbs 9.21 - 9.71
Sodium salicylate, USP dms., 1,000-lbs or more lb. .78½ - —
dms., less than 1,000 lbs dms. lb. .81½ - —
Sodium sesquicarbonate, bgs., c.l., works 100 lbs 2.35 - —
bgs., l.c.l., divd. zone 1 100 lbs 4.10 - 4.35
divd. zone 2 100 lbs 4.35 - 4.60
divd. zone 3 100 lbs 4.75 - 4.90
divd zone 4 100 lbs 5.35 - 5.60

Sales zones are: (1) Atl states E. of Miss., E and N of south bound of Ky and Va., Ala., La., and Miss., south of 31°; Tex E. of 100°; S. of 31° Fla.; also Ala., N. H and Vt. in which there are special county zones; Davenport, Ia., and St. Louis; (2) Ark E. of 98° Ga.; Iowa (except Davenport) Minn, Mo. (except St Louis) Neb E. of 98° N. C., S. C., Tenn and Tex. N of 31° and E. of 100° (except Wichita Falls); also Ala. La and Miss. No of 31°; (3) Ark W of 96°, Kan., Neb W, of 98° N D., Okla., S D., Tex., W of 100° (including Wichita Falls excluding El Paso); (4) Ariz., Colo., Idaho, Mont., Nev., N. M., Utah, Wyo and El Paso Tex

Sodium sesquisilicate, anhyd., bgs., c.l., t.l., works 100 lbs 5.70 - —
dms., c.l., t.l., works 100 lbs 6.20 - —
Hydrated, bgs., c.l., works 100 lbs. 5.00 - —
bgs., 6,000-19,900 lb lots, works, 100 lbs 5.35 - —
dms., c.l., works 100 lbs 5.50 - —
dms., 6,000-19,900 lb. lots, works, 100 lbs. 5.85 - —
Sodium silicate, liq., 40° Be. 1:3.2, turbid, dms., c.l., works 100 lbs. 1.65 - —
dms t.c.l., works 100 lbs 1.90 - 2.40
tanks, works 100 lbs 1.20 - —
47° Be., 1:29.9, turbid, dms., c.l., works 100 lbs. 2.25 - —
dms., t.c.l., works 100 lbs 2.60 - 3.45
tanks, works 100 lbs 1.90 - —
52° Be., 1:2.4, turbid, dms., c.l., works 100 lbs. 2.65 - —
dms., t.c.l., works 100 lbs 3.00 - 3.50
tanks, works 100 lbs 2.30 - —
Solid, 1:3.2, bgs., works ton 67.50 - —
Sodium silicofluoride, bgs., c.l., works lb. .065 - —
bgs., l.c.l., works lb. .725 - —
Sodium silicofluoride in dms, 0.4c. per lb. higher.
Sodium stannate, dms., works, frt. alld. E lb. .638 - .697
Sodium sulfa drugs (see Sulfa name).
Sodium sulfanilate, bbls., works lb. .22 - —
Sodium sulfate, NF VII, dried, powd., dms lb. .22½ - —
Tech., anhyd., bgs., c.l., divd. E. ton 54.00 - —
Sodium sulfate, tech., detergent, rayon grade, bgs., c.l., works ton 36.00 - —
bulk, c.l., works ton 32.00 - —
USP, cryst., fib. dms. lb .17½ - .18
Sodium sulfhydrate, flake, 70-72%, dms., c.l., works frt equald, lb. .07¼ - —
dms., l.c.l., same basis lb. .08¼ - —
Liq., 40-44%, tanks, works, 100% basis ton 130.00 - —
Sodium sulfide, flake, dms., c.l., works, E., frt equald lb. .06 - —
dms., l.c.l., same basis lb. .07 - —
Fused, bbls., c.l., works, E., frt. equald lb .05½ - —
bbls., l.c.l., same basis lb. .06½ - —
Sodium sulfite, anhyd., powd., bgs., c.l., works 100 lbs. 7.55 - —
bgs., l.c.l., same basis 100 lbs. 7.95 - —
Tech., anhyd., bgs., c.l., works, 100 lbs. 3.50 - —
bgs., t.l., same basis 100 lbs. 4.00 - —
Sodium sulfocyanide, CP (see Sodium thiocyanate).
Sodium tetraborate (see Borax)
Sodium tetrasulfide, liq., 40% dms., c.l., works, frt equald lb. .04½ - —
dms., l.c.l., same basis lb. .05½ - —
Sodium thiocyanate, CP, dms lb. .55 - .65
Tech., anhyd., dms., 1 ton lots or more, works lb. .317 - —
dms., less than ton lots, works lb. .337 - —
Sodium thiosulfate, NF, cryst, bbls, lb. .13½ - —
Tech., anhyd., 100-lb. bgs., c.l., t.l., frt. equald 100 lbs. 7.75 - —
100-lb. bgs., l.c.l., l.t.l., frt. equald 100 lbs. 8.15 - —
Tech., anhyd., photo grade, 64-lb. bgs., c.l., t.l., frt. equald, lb. .0775 - —
64-lb. bgs., l.c.l., l.t.l., frt. equald lb. .0815 - —
Tech., pentahydrate, photo grade, 100-lb. bgs., c.l., t.l., frt. equald 100 lbs. 4.95 - —
100-lb. bgs., l.c.l., l.t.l., frt. equald 100 lbs. 5.20 - —
Sodium titanate, ctns., c.l., works, lb. .14¼ - —
ctns., 5-ton lots, works lb. .14½ - —
ctns., 1-ton or less, works lb. .14¾ - —
Sodium trichloroacetate, 90%, 100-lb. dms., c.l., frt. alld E. lb. .35 - —
50-lb. dms., c.l., frt. alld. E lb. .35½ - —
10-lb cns., c.l., frt. alld. E lb. .42 - —
Prices on Sodium trichloroacetate W of the Rockies are 1¾c. per pound higher.
Sodium tripolyphosphate, bgs., c.l., works, frt equald 100 lbs. 8.16 - —
bgs., t.c.l., same basis 100 lbs 8.56 - 8.96
Sodium trisilicate, powd., 1:3.2 bgs., c.l., works 100 lbs 8.95 - —
bgs., t.c.l., works 100 lbs 9.70 - 13.13
dms., c.l., works 100 lbs. 9.45 - —
dms., l.c.l., works 100 lbs. 10.20 - 10.60
Sodium tungstate, tech., bgs divd. E lb. 1.09 - —
Sodium-ammonium phosphate, purif., cryst., dms., works lb. .52 - —
Sodium-carboxymethyl cellulose (see CMC).
Sodium-cinchophen (see Cinchophen-sodium).
Sodium-formaldehyde sulfoxylate, dms., c.l., divd lb. .21 - —
dms., l.c.l., same basis lb. .21½ - —
Sodium-zirconyl sulfate, fib. dms., 1,000-lb. lots or more works lb. .28 - —
fib., dms., smaller lots, same basis lb. .30 - —
Solvent naphtha, coaltar, high-flash, tanks, frt. equald gal. .30 - .35¼
Solvent naphtha, petroleum, straight aromatic, 310°F-360°F b.r., 14°-16°C m.a.p., tankcars, New Jersey and New York gal. .31 - —
Houston, Texas gal. .29 - —
355°F-420°F b.r., 17°-18°C. m.a.p., tankcars, New Jersey and New York gal. .32 - —
Houston, Texas gal. .30 - —

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There was trouble on the assembly line. Sticky, dull finish picked up dirt... smelled terrible.
What you need is faster film setting, higher solvency and better odor... in short, Solvesso Xylol!
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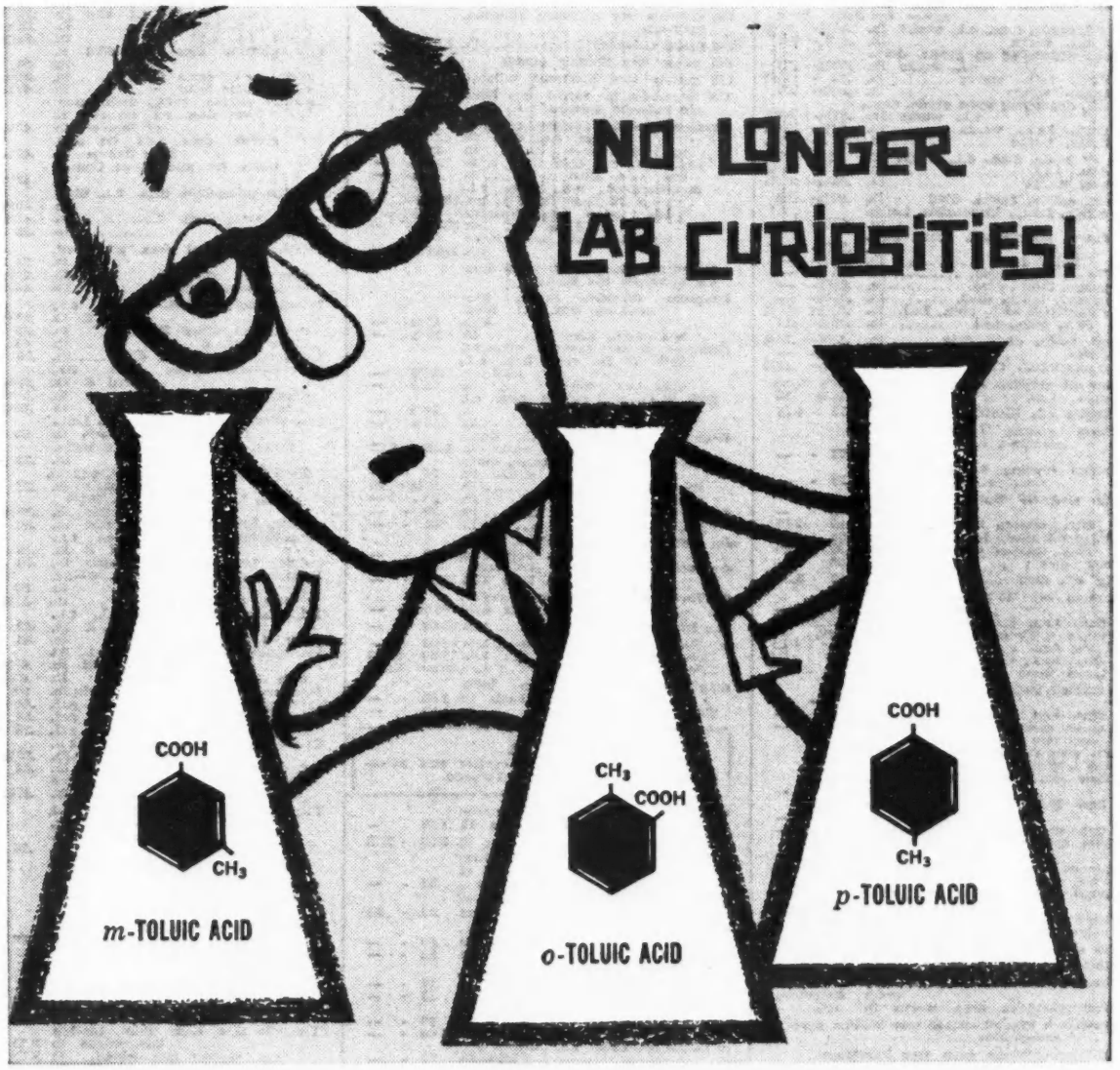
In industry after industry... "ESSO RESEARCH works wonders with oil"

Solvent naphtha, petroleum, partial aromatic, 211°F-265°F b.r., 31°C. m.a.p., tankcars New Jersey and New York gal.	.233	-	—
286°F-340°F b.r., 22°C m.a.p., tankcars New Jersey and New York gal.	.275	-	—
319°F-380°F b.r., 27°C m.a.p., tankcars, New Jersey and New York gal.	.285	-	—
322°F-395°F b.r., 28°C. m.a.p., tankcars, New Jersey and New York gal.	.295	-	—
Sorbitan monostearate, fib. dms., 20,000-lb. lots, works lb.	.33	-	—
fib. dms., 10,000 to 20,000-lb. lots, works lb.	.35	-	—
fib. dms., smaller lots, works lb.	.38	-	.40
Sorbitan tristearate, fib. dms., 20,000-lb lots, works lb.	.34	-	—
fib. dms., 10,000 to 20,000-lb. lots, works lb.	.36	-	—
fib. dms., smaller lots, works lb.	.39	-	.41
Sorbitol, NF, reg., 70% aqueous, dms., c.l., works lb.	.18	-	—
dms., l.c.l., works lb.	.19	-	—
tanks, works lb.	.16¼	-	—
Cryst., resin grade, pellets, dms., c.l., works lb.	.23	-	—
dms., 1 to 5-ton lots, works, lb.	.25	-	.26
Sorbitol, powd., dms., c.l., works, lb.	.36	-	—
dms., 1 to 5-ton lots, works, lb.	.38	-	.39
Soln., coml., aqueous, dms., c.l., works lb.	.24¼	-	—
dms., ton lots, works lb.	.25	-	—
dms., smaller lots, works lb.	.25¼	-	—
tanks, works lb.	.23¼	-	—
Soya protein, chemically isolated, old process, bgs., c.l. works, lb.	.23	-	—
bgs., l.c.l., works lb.	.23¼	-	.23½
Chemically isolated, new process, bgs., c.l. works lb.	.20	-	—
bgs., l.c.l., works lb.	.20¼	-	.20½
Soybean meal, 44%, bulk, unrestricted, Decatur ton.	57.50	-	—
Soybean oil, crude, tanks, Decatur, lb.	.07⅞	-	—
Foots, soapstock, acid 95%, tanks, N. Y. lb.	.05½	-	—
Refd., alkali, dms. lb.	.1200	-	.1225
tanks lb.	.10	-	—
clarified, dms. lb.	.1150	-	.1175
tanks lb.	.09½	-	—
salad, dms. lb.	.1170	-	.1195
tanks lb.	.0370	-	—
Soybean oil acids, dbl. dist., dms., lb.	.18	-	.20½
tanks lb.	.15½	-	—
S. D., dms lb.	.16¾	-	.19¼
tanks lb.	.14¼	-	—
Spartelne sulfate, cns., 100 oz. or more oz.	.80	-	—
Spearmint leaves, dom. bls. lb	75	-	—
Spearmint oil, NF, dms lb.	9.00	-	11.25
Sperm oil, bleached, winter, 45° dms lb.	.1475	-	.1575
tanks lb.	.1275	-	—
Nat., winter, 45°, dms. lb.	.1375	-	—
tanks lb.	.1175	-	—
Spermaceti wax, blocks, cs. lb.	.31	-	.33
Cakes, cs lb.	.32	-	.34
Spruce oil cns., dms. lb	2.10		3.55
Squill, white, bls lb.	.16	-	.18
powd., bbls., bxs lb.	.17	-	.20
St. John's bread, edible bls. lb.	.17	-	—
Stannic chloride, anhyd., dms., works lb.	.808	-	.830
Stannic oxide, dms., dlvd. lb.	1.07½	-	1.08½
Stannous chloride, anhyd, dms. works lb.	1.001	-	1.256
Hydrous, cryst., dms., works lb.	.86½	-	.87½
Stannous sulfate, dms., works lb.	1.056	-	1.076
Star root (see Helonias root)			
Stargrass root (see Aletris root)			
Staves acre seed, bgs lb.	.60		.61
Stearic acid, dbl., pressed bgs. lb.	.15¾	-	.18¼
Single-pressed, bgs. lb.	.15¼	-	.17¾
Triple-pressed, bgs. lb.	.17½	-	.20
Stearine, meo (see Oleostearine)			
Stoddard solvent, petroleum, tanks, east coast, New Jersey, New York gal.	.18	-	—
tanks, Houston gal.	.1475	-	—
tanks, group 3 gal.	.12875	-	—
Stramonium leaves, bgs. lb.	.13	-	—
Streptomycin hydrochloride, bulk, gram.	.04	-	.041
Streptomycin sulfate, bulk gram.	.04	-	.041
Strontium bromide, NF, cryst., 100-lb. dm., f.o.b. E lb.	.92	-	—
Strontium carbonate, pure, dms., 5-ton lots or more, works lb.	.35	-	—
dms., 1-ton lots, works lb.	.37	-	—
Tech., dms., works lb.	.19	-	—
Strontium chromate, fib. dms., dlvd. lb.	.48	-	—
Strontium iodide, jars, 25-lb. lots, lb	3.57	-	—
Strontium nitrate, bgs., c.l., works, 100 lbs.	11.00	-	—
bgs., l.c.l., works 100 lbs.	12.00	-	—
Strontium salicylate, NF, dms. lb	1.88	-	—
Strontium sulfate, air floated, 90%, 325 mesh, bgs., works ton.	56.70	-	66.15
Strophanthin G (see Ouabain, USP)			
Strophanthin K, bots oz.	25.00	-	25.50
Strophanthus seed, Kombi, biologically tested, bgs lb	3.50		3.75
Styrax gum, USP cs lb.	4.50	-	5.50
Styrene monomer, polymer grade, 99.6% dms. c.l. frt. alld. lb.	.17	-	—
dms., c.l., same basis lb.	.19	-	—
tanks, same basis lb.	.14½	-	—
Tech., 99.2%, dms., c.l. lb.	.1467	-	—
dms., l.c.l., same basis lb.	.1667	-	—
tanks, bulk, same basis lb.	.1217	-	—

Above prices are escalated for each calendar quarter on the basis of cost of crude oil at the well, cost of petroleum refining labor, and prices in the three major sections of the Wholesale Commodity Price Index.

Styrolyl acetate, bots lb	1.25	-	1.45
Succinic acid, purif., cryst., dms., t.l., frt. alld lb.	.62	-	.75
Succinic anhydride, dms., c.l., t.l., dlvd lb.	.51	-	—
dms., l.t.l., same basis lb.	.63	-	—
dms., l.c.l., same basis lb.	.52	-	—
Sucrose, refd. white bgs. refy lb.	.0935	-	—
Sucrose acetate isobutyrate, 90%, dms., t.l., dlvd lb.	.33½	-	—
dms., l.t.l., same basis lb.	.35	-	—
tanks, same basis lb.	.31	-	—
100%, t.l., dms., dlvd. lb.	.35½	-	—
l.t.l., dms., same basis lb.	.37	-	—
Sucrose octa-acetate, denaturing grade, 100-200-lb. lots, bgs., l.c.l. works lb.	1.00	-	—
Sugar (see Sucrose)			
Sugar cane wax, dom., refd., slabs, 80-lb. ctns works lb.	.60	-	.65
80-lb. ctns., spot lb.	.65	-	.75
Sulfabenzamide, dms kilo.	8.80		9.90
Sulfabenzamide-sodium, dms. kilo.	9.00	-	10.10
Sulfacetamide, USP, fib. dms kilo.	6.61		6.83
Sulfacetamide-sodium, USP, fib. dms kilo.	8.15		9.25
Sulfadiazine, USP, microcrystals, dms kilo.	23.35	-	24.45
USP, powd., dms. kilo.	22.60	-	23.70
Sulfadiazine-sodium, USP, dms kilo.	24.80		25.90
Sulfaguanidine, NF X, dms. kilo	5.50	-	6.60
dms kilo.	23.50	-	24.60
Sulfamerazine-sodium, USP, powd., dms kilo.	24.80	-	25.90
Sulfamethazine, USP XV, microcrystals, dms kilo.	19.65	-	20.75
USP XV, powd., dms kilo.	18.75	-	19.85
Sulfamic acid, cryst., dms., c.l., t.l., works 100 lbs.	16.00	-	—
dms., l.c.l., t.t.l., works 100 lbs.	17.50	-	18.50
Gran., dms., c.l., t.l., works 100 lbs.	14.75	-	—
dms., l.c.l., t.t.l., works 100 lbs.	16.25	-	17.25
Sulfanilamide, NF, reg., 1,000 lb., frt. equald lb.	1.50	-	—
NF, fib. dm., frt. equald lb.	1.55	-	—
Sulfanilamide quinoxaline, veterinary dms kilo.	16.28	-	—
Sulfanilic acid, tech., dms. c.l., frt. alld lb.	.21	-	—
dms., l.c.l., frt alld lb.	.23	-	—
Sulfapyridine, USP XV, powd. bots tins kilo.	15.45	-	16.55
Sulfapyridine-sodium, monohydrate, dms kilo.	16.55	-	17.65
Sulfathiazole, NF X, microcrystals, dms kilo.	6.25	-	6.90
NF X, powd., dms. kilo.	5.50	-	6.15
Sulfathiazole-sodium, NF X, dms., 1,000-lb lots or more lb	2.35	-	—
Sulfur, coml., flour, bgs., mines, 100 lbs	2.35	-	—
bbls., mines 100 lbs	3.30	-	—
lump, bgs., mines 100 lbs	2.25	-	—
bbls., mines 100 lbs	2.80	-	—
Sulfur, crude, dom., bright, bulk, f.o.b. cars, mines long-ton.	23.50	-	—
Sulfur, crude, export, f.o.b. vessels, Gulf ports, long-ton.	25.00	-	—
US and Canada f.o.b. vessels Gulf ports long-ton.	25.00	-	—
Domestic dark sulfur prices are $1 per long-ton lower			
Sulfur, crude, imp., Mexican, bulk, filtered, f.o.b. vessel, Coatzacoalcos long-ton.	24.00	-	—
Mexican dark sulfur price is $1 per long-ton lower			
Sulfur, refd., flowers, NF, bgs., mines 100 lbs.	5.65	-	—
bbls., mines 100 lbs.	7.00	-	—
flour, light, bgs., mines 100 lbs.	5.25	-	—
bbls., mines 100 lbs.	6.25	-	—
lump, bgs., mines 100 lbs.	4.95	-	—
rolls, bgs., mines 100 lbs.	5.50	-	—
bbls., mines 100 lbs.	6.25	-	—
salt block, bgs., mines 100 lbs.	4.65	-	—
virgin block, bbls., mines 100 lbs	4.70	-	—
Sulfur, rubbermakers, coml., reg., bgs., mines 100 lbs	2.45	-	—
bbls., mines 100 lbs	3.70	-	—
98-100%, passing through 325 mesh, bgs., mines 100 lbs	2.55	-	—
bbls., mines 100 lbs	3.80	-	—
refd., bgs., mines 100 lbs	4.90	-	—
bbls., mines 100 lbs.	6.05	-	—
treated, 2.5% mineral oil, bgs., mines 100 lbs	2.75	-	—
bbls., mines 100 lbs	4.00	-	—
Sulfur dichloride, ret. dms. c.l., works frt equald lb	04½	-	—
ret. dms. t.c.l. same basis lb	05¼	-	—
tanks same basis lb.	.04	-	—
Sulfur dioxide, liq. coml., cyls. works, frt equald lb	10		12
multi-unit cars, works lb	0535	-	—
tanks, works lb	045	-	—
Sulfur dioxide, refrigeration, cyls., dlvd lb.	.33	-	—
Sulfur monochloride, 55-gal. non ret. dms., c.l. frt equald lb	04¼	-	—
dms., t.c.l., same basis lb	05¼	-	—
tanks, same basis lb	04	-	—
Sulfuric acid, 60° Be., chys., c.l. works 100 lbs	2.00	-	—
chys., t.c.l., works 100 lbs	2.30	-	—
tanks, works ton	18.60	-	—
66° Be., chys., c.l., works 100 lbs	2.25	-	—
chys., t.c.l., works 100 lbs	2.55	-	3.35
tanks, works ton	22.35	-	—
Sulfuric acid, 98%, tanks, works ton	23.50	-	—
99%, tanks, works ton	23.70	-	—
100%, tanks, works ton	23.95	-	—
CP, NF, consumers' chys., c.l., frt. equald lb.	12¾	-	—
consumers' chys., t.c.l., same basis lb.	.14¼	-	.14¾
5-pt. bots, extra cs., c.l., works, frt alld lb	16¼	-	—
5-pt. bots, extra cs., t.c.l. same basis lb	17¾	-	.18¾
Sulfuric acid, fuming (oleum), 20% tanks, works ton	25.00	-	—
40%, tanks, works ton	29.00	-	—
65%, tanks, works ton.	39.50	-	—



Cowles provides high purity Toluic Acids in commercial quantities

Whether your interest is in pharmaceuticals, insecticides, dyestuffs, alkyd resins or polyester resins, Cowles' facilities for large-scale production of o-Toluic, m-Toluic and p-Toluic acids make it possible for you to consider their various advantages as organic building blocks in commercial operations.

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CHEMICAL COMPANY

Cleveland 3, Ohio

Superphosphate—White Pink Bark

Superphosphate run-of-pile, under 22% a.p.a., pulv., bulk, c.l. Baltimore unit-ton. .90 - .93
bulk, c.l., Carteret, N. J. unit-ton. .90 - .93
bulk, f.o.b. vessel unit-ton 1.02 - —
Superphosphate triple 48% or more a.p.a., pulv., bulk, c.l., East Tampa, Fla unit-ton. .98 - —
Sweet birch oil, USP, northern, cns lb 4.00 - 9.50
USP southern, cns. lb 2.00 - 3.05

T

2,4,5-T dms. c.l. works frt equald. lb 1.18 - —
dms. l.c.l. same basis lb 1.25 - —
2,4,5-T isopropyl ester, dms., c.l., works frt equald lb 1.24 - —
dms. l.c.l., works lb 1.29 - —
Talc, dom. fibrous New York grd bgs. c.l., works ton 28.00 - —
bgs. l.c.l., works ton 31.00 - 36.00
fibrous, New York 99.5% 325 mesh bgs. c.l. works ton 31.00 - —
bgs. l.c.l., works ton 34.00 - —
Talc, fibrous, 99.05%, 400 mesh, micronized bgs. c.l. works ton 38.00 - —
625 mesh micronized, bgs. c.l. works ton 80.00 - —
ord., Calif., grd., bgs., c.l., works ton 34.00 - 39.50
Vermont, off-color grd. bgs., c.l., works ton 19.40 - —
bgs. l.c.l. works ton 37.00 - —
Imp. Canadian grd. bgs., c.l. mines ton 20.00 - 35.00
Tall oil, crude, dms., c.l., works lb. .04½- .04¾
tanks, works lb. .02¾- .03
Dist., depending on grade, dms., c.l., works lb. .07¾- .10
dms., l.c.l., works lb. .08 - .10¼
tanks, works lb. .05¾- .08
Refd., depending upon grade, dms., c.l., works lb. .07¼- .09¼
dms., l.c.l., works lb. .07½- .09¾
tanks, works lb. .05¼- .07¼
Tall oil acids, dms., c.l., works lb. .08¼ .11¾
dms., l.c.l. lb. .08¾- .12¼
tanks, works lb. .06½- .09¾
Tallow, edible, tanks, dlvd lb. .07¾- .08
Inedible, fancy, bleachable, tanks, lb. .05¾- —
fancy, guaranteed, dms., f.a.s. lb. .0720- —
bulk, f.o.b. lb. .0620- —
No. 1, tanks, dlvd. lb. .05 - —
prime, tanks, dlvd. lb. .05¾- —
special, tanks, dlvd. lb. .05½- —
sulfonated, 25%, bbls., l.c.l. lb. .03½- .08¾
50%, bbls., l.c.l. lb. .10½- .11
Tallow acids, dist., dms. lb. .13¼- .15¾
tanks lb. .10¾- —
Hydrogenated, dms. lb. .14¾- .17¼
Tallow oil acidless, dms. c.l. lb. .13½ Nom.
dms., l.c.l. lb. .14½ .16
Tangerine oil, Florida, dms lb. 3.75 - 4.75
Tankage, animal, feeding, 9-11% ammonia New York bulk unit-ton. 4.75 - —
Animal, feeding, 9-11% ammonia, Chicago, bulk unit-ton. 5.25 - —
Tannic acid NF fluffy bbls. 1,000-lb lots lb 2.05 - —
bbls., smaller lots lb 2.06 2.07
NF, powd., bbls., 1,000-lb. lots lb 1.95 - —
bbls., smaller lots lb 1.96 1.99
Tech. dms lb 1.05 - —
Tansy oil, dms lb. 6.60 - 8.00
Tar acid oil, 15-18% dms., c.l., frt equald gal. .53½- —
dms., l.c.l., same basis gal. .55½- —
tanks, same basis gal. .43½- —
25-28% dms. c.l., same basis gal. .60 - —
dms., l.c.l., same basis gal. .62 - —
tanks same basis gal. .50 - —
Tar acid oil, 50-53%, dms., c.l., same basis gal. .75 - —
dms., l.c.l., same basis gal. .77 - —
tanks same basis gal. .65 - —
Tar, coal (see Coaltar)
Tartar emetic (see Antimony potassium tartrate)
Tartaric acid, NF, 100-lb bgs., c.l., frt equald lb. .41 - —
bgs., 10,000 lbs., 1 shipt., same basis lb. .43 - —
bgs. smaller lots, same basis lb. .47 - —
Terpine hydrate, NF, cryst. powd., 100-lb fib dms lb. .70 - —
Terpineol, extra, dms lb. .50 - .60
Prime, dms lb. .40 - .50
Terpinyl acetate, extra, cns. dms. lb .64 - .75
Prime, dms lb .53 - .56
Terpinyl propionate dms. lb 1.75 - 3.00
Terra alba (see Gypsum).
Testosterone, USP, bots. gram. No prices.
Testosterone proprionate USP bots. gram. No prices.
Tetrachloroethane, dms. works lb. .14½ —
Tetrasodium pyrophosphate (see Sodium pyrophosphate)
Tetrachloroethylene tech (see Perchloroethylene)
Tetrachloroethylene, USP, 55-gal. dms., c.l., t.l., works lb. .20½- —
dms., l.c.l. works lb. .22 - .23½
Tetraethyl orthosilicate dms., c.l., dlvd E lb. .60 - —
dms. l.c.l., dlvd E lb. .61½- —
Tetraethyl pyrophosphate, 40%, cns., dms. frt equald lb. .75 - —
Tetraethylenepentamine dms., c.l., dlvd E lb. .53½- —
dms., l.c.l., dlvd E. lb. .55 - —
tanks, dlvd E lb. .51 - —
Tetraethylthiuram disulfide, tech., dms. frt alld lb. 1.04 - —
Tetrahydrofuran, dms., c.l., t.l., works lb. .36¼- —
dms., l.c.l., or t.l.l., works lb. .37 - —
tanks, works lb. .35 - —
Tetrahydrofurfuryl alcohol, dms., c.l., t.l., Memphis, Tenn. lb. .31½- —
dms., l.c.l., Memphis, Tenn lb. .32½- —
dms., c.l., t.l., Newark, N.J lb. .33½- —
dms., l.c.l., Newark, N.J lb. .34½- —
tanks, dlvd E of Denver lb. .31 - —
tanks dlvd W of Denver lb. .32 - —
Tetrahydrophthalic anhydride, dms., c.l., t.l., frt. alld. E lb. .39 - —
l.c.l., t.l.l., same basis lb. .41 - —
Tetrapotassium phosphate (see potassium phosphate)
Thallium metal dlvd lb 7.50 -10.00
Thallium sulfate 99% bots. dlvd. lb 5.00 -10.00
Theobromine, NF, fib. dms., 100-lbs., f.o.b., works lb. 5.50 - —
Theobromine and sodium acetate, USP, fib. cms., 500-lbs. works, lb. 6.45 - —
Theobromine sodio-salicylate, NF, fib. cms., 500-lbs., works lb. 5.45 - —
Theophyline, USP, anhyd., 100-lb. dms., frt. alld lb. 3.65 - —
Thiamine hydrochloride, USP, fib. dms., frt. alld. kilo. 36.00 - —
USP, ampule grade, fib. dms., frt. alld. kilo. 38.00 - —
Thiamine mononitrate, USP, fib. dms., frt. alld. kilo. 36.00 - —
Thiocarbanilide, dms., ton lots lb. 72 - —
dms., less ton lots lb. 74 - —
Thiodiphenylamine (see Phenothiazine).
Thioflavin green toner, brilliant, molybdated, PMA, kgs., works lb. 5.20 - —
Tungstated, PTMA, kgs., works, lb. 6.20 - —
Thioglycolic acid, refd., 55 gal. dms., ton lots, 100% basis lb. 1.15 - —
Thiosalicylic acid, purif., dms., 1,000-lb., lots, works lb. 4.00 - —
Thiourea, tech., bgs., t.l., frt. alld. lb. .30 - —
bgs., ton lots, same basis lb. .32 - —
bgs., less than ton lots, same basis lb. .33 - —
Thorium nitrate, purif., fib dms., 100-lb. lots or more, works lb 3.50 - —
dl-Threonine bots., 1-kilo lots kilo. 275.00 - —
Thyme leaves, French bgs lb 29 - —
Spanish, bgs. lb 14 - —
Thyme oil, NF, red, cns., dms lb. 1.90 - 2.25
NF, white, cns lb. 2.20 - 2.60
Tech white cns lb .40 1.85
Thymol, fib. dms., 25-lbs., f.o.b. works, lb. 3.06 - —
Thymol iodide, NF, dms., 100-lbs. f.o.b. works lb. 7.40 - —
Timbo root (see Cube root).
Tin chloride (see Stannous chloride, anhyd.).
Tin crystals (see Stannous chloride, hydrous)
Tin metal (Straits) lb. 1.01 - —
Tin oxide (see Stannic oxide).
Tin sulfate (see Stannous sulfate).
Tin tetrachloride anhyd (see Stannic chloride anhyd.).
Titanium dioxide, anatase, ceramic, bgs., c.l., dlvd lb. .25½- —
bgs., l.c.l., dlvd lb. .26½- —
reg., bgs., c.l., dlvd lb. .25½- —
bgs l.c.l., dlvd lb. .26½- —
metallurgical, nat., bgs., c.l., f.o.b. Jacksonville Fla ton. 180.00 - —
bgs., 5-ton lots Niagara Falls, N.Y ton 205.00 - —
bgs., ton lots same basis ton. 215.00 - —
Milled metallurgical titanium dioxide $7.50 per ton higher.
Titanium dioxide, rutile, non-chalking, bgs., c.l., dlvd. E lb. .27½- —
bgs., l.c.l., dlvd. E lb. .28½- —
Titanium dioxide-calcium pigment, 30% Ti O_2, reg., bgs., c.l., dlvd lb. .09¾- —
bgs. l.c.l., works lb. .09¾- —
50% Ti O_2, high-tinting dms. c.l. lb. .14¾- —
dms. l.c.l lb. .14¾- —
Titanium hydride, powd., dms., works lb 8.10 - 9.00
Titanium tetrachloride, tech., dms., c.l., works lb. 26 - —
dms., l.c.l., works lb. .27½- .29
tanks, works lb. 20 - —
Tobias acid, dms., c.l., t.l. lb. .78 - —
dms., l.c.l. lb. .81 - —
d-a-Tocopherols, NF, mixer, conc., pure basis bots kilo. 67.00 - —
d-a-Tocopheryl acetate, NF, conc., pure basis, bots kilo. 122.00 - —
d-a-Tocopheryl acid succinate, cryst., bots kilo 109.00 - —
dl-a-Tocopherol, bots kilo. 99.00 - —
d-a-Tocopheryl acetate bots kilo. 90.00 - —
25% dry, powd., bots. kilo. 22.50 - 24.00
33% dry powd., bots. kilo. 30.00 - 31.50
o-Tolidine base, dry, kgs., 100% basis lb 1.55 - —
Paste kgs. 100% basis lb 1.50 - —

TOLUOL

Toluol quotations, both coaltar and petroleum, may be found under Toluene.

o-Tolidine hydrochloride, paste, kgs., 100% basis lb 1.50 - —
Tolu balsam, cns lb. 3.50 - 3.75
Toluene, coaltar, indust., or nitration tanks, dlvd. E of Rockies gal. .25 - —
Toluene, petroleum indust., tanks, dlvd E of Rockies gal. .25 - .32
p-Toluenesulfonamide, powd., dms., t.l., works lb. .60 - —
dms., t.t.l., same basis lb. .63 - —
Toluenesulfonic acid, dms., c.l., t.l., works lb. .17 - —
dms. l.c.l. works lb. .18 - —
p-Toluenesulfonic acid monohydrate, dms., c.l. or t.l. lb. .90 - —
dms., 125 lbs. to t.l. lb. 1.00 - —
m-Toluidine, dms., c.l., works, frt. alld lb. .83 - —
dms., l.c.l., same basis lb. .84 - —
tanks, same basis lb. .82 - —
o-Toluidine, dms., c.l., works, frt. alld lb. .30 - —
dms., l.c.l., same basis lb. .31 - —
tanks, same basis lb. .28 - —
p-Toluidine, tech., flake, dms., frt. alld lb. .50 - —
Cast, dms frt alld lb. .45 - —
p-Toluidine-m-sulfonic acid, dms., works lb. .92 - 1.04
Toluidine red toner, deep shades, kgs., works lb. 1.70 - —
Light shades, kgs. works lb. 1.70 - —
2,4-Tolylenediamine, cryst., fib. dms., l.c.l. frt alld lb 1.10 - —
Tonka beans, Angostura, cks. lb. 1.50 - —
Brazilian, Surinam, cs. lb. 1.50 - —
Totaquine, 100-oz. lots, cns oz. .42 - —
Toxaphene, dms. c.l. t.l., works, lb. .22 - —
dms. l.c.l., t.t.l., works lb. .28 - —
Tragacanth gum, No. 1, ribbons, cs. lb. 3.60 - 3.75
No. 2, cs lb. 3.40 - 3.60
No. 3, cs lb. 3.15 - 3.25
USP powd., bbls. lb. 1.05 - 1.15
Triacetin, dms., c.l., dlvd. E. of Rockies lb. .39 - —
dms., l.c.l., same basis. lb. .40 - —
tanks, same basis lb. .37 - —
Triallylamine, dms., c.l., dlvd. lb. .985 - —
dms., l.c.l., dlvd. lb. .995 - —
tanks, dlvd. lb. .96 - —
Tributyl citrate, tech., non-ret. dms., c.l., frt. alld E of Denver, lb. .42½- —
non-ret. dms., l.c.l., frt. alld. E. of Denver lb. .43½- —
tanks, frt alld E of Denver lb. .40 - —
Tributyl phosphate, dms. c.l., works, lb. .52½- —
dms., l.c.l., same basis. lb. .53½- —
tanks, same basis. lb. .50 - —
Tributylamine, dms., c.l., works lb. .67½- —
dms., l.c.l., same basis lb. .69 - —
tanks, same basis lb. .65 - —
Tributyrin, dms., l.c.l., dlvd. lb. .69 - —
Trichloroacetic acid, bots. lb. 2.00 - 2.50
Trichlorobenzene, dms., c.l., frt. alld. E lb. .15 - —
dms., l.c.l., frt. alld. E. lb. .16 - —
tanks, frt. alld. E. lb. .13¼- —
Trichlorobenzene prices in the West 1¾c. higher.
1,1,1-Trichloroethane, dms., c.l., dlvd. lb. .13¼- —
dms., l.c.l., dlvd. lb. .13¼- —
tanks, dlvd. lb. .12¼- —
1,1,2-Trichloroethane, dms., c.l., works lb. .13½- —
dms., l.c.l., dlvd. E. lb. .14¼- —
tanks, works lb. .11½- —
Trichloroethylene, dms., c.l., or t.l., works, frt. equald lb. .13 - —
dms., l.c.l., frt. alld. lb. .15 - .16¾
tanks works, frt equald. lb. .12 - —
Trichloroisocyanuric acid, dms., c.l., t.l., frt. equald lb. .65 - —
dms., l.c.l., same basis lb. .75 - —
Trichlorophenoxyacetic acid (see 2,4,5-T).
Tricholine citrate, 65% soln., ret chys. works, frt adjusted. lb 1.40 - 1.45
Tricresyl phosphate, coaltar, dms., c.l., dlvd lb. .35 - —
dms., l.c.l., dlvd. lb. .36 - —
tanks, dlvd lb. .32½- —
Tricresyl phosphate, petroleum, dms., c.l., dlvd. lb. .34½- —
dms., l.c.l., dlvd lb. .35½- —
tanks, dlvd lb. .32½- —
Tridecyl alcohol, mixed isomers, dms., c.l., dlvd. E lb. .26½- —
dms., l.c.l., dlvd. E lb. .28 - —
tanks, dlvd E lb. .24 - —
Triethanolamine dms. c.l. dlvd E. lb. .24½- —
dms., l.c.l., same basis lb. .26 - —
tanks, same basis lb. .22 - —
Triethanolamine lauryl sulfate, dms., c.l., t.l., frt. alld lb. .25½- —
dms., l.t.l., frt. alld. lb. .26½- —
tanks, frt. alld lb. .24½- —
Triethylamine, dms., c.l., dlvd E. lb. .50 - —
dms., l.c.l., same basis lb. .51½- —
tanks, same basis lb. .47½- —
Triethyl citrate, refd., tech., non-ret. dms., c.l., frt alld E. of Denver lb. .46¼- —
non-ret. dms., l.c.l., frt. alld. E of Denver lb. .47¼- —
tanks, frt. alld E. of Denver lb. .43¾- —
Triethyl phosphate, dms., c.l., dlvd. lb. .40½- —
dms., l.c.l., dlvd. lb. .41½- —
tanks, dlvd. lb. .38 - —
Triethylene glycol, dms., c.l., dlvd. E lb. .21 - —
dms., l.c.l., dlvd. E. lb. .22½- —
tanks, same basis lb. .18½- —
Triethylenetetramine, dms., c.l., dlvd. E lb. .51¼- —
dms., l.c.l., dlvd. E. lb. .53 - —
tanks, dlvd E lb. .49 - —
Triisobutylene, tanks, dlvd lb. .08 - —
Tri-isopropanolamine, dms., c.l., dlvd. E lb. .23¼- —
dms., l.c.l., dlvd E. lb. .24¾- —
tanks, dlvd E lb. .20¾- —
Trimethylamine, anhyd., cyls., l.c.l., frt equald, 100% basis lb. .30 - .305
tanks, frt. equald, 100% basis. lb. .26 - —
25-40% soln., dms., c.l., frt. equald, 100% basis lb. .35 - —
dms., l.c.l., frt. equald, 100% basis lb. .35½- —
tanks, 100% basis, frt. equald lb. .26 - —
Trimethylolpropane, dms., c.l., t.l., dlvd. E lb. .35 - —
dms., l.c.l., t.l.l., same basis lb. .36 - —
Trioxane, pure, dms. c.l., t.l., works, lb. .50 - —
dms. l.c.l. works lb. .51½- —
Tripentaerythritol, bgs., c.l., t.l., dlvd. E lb. .40 - —
bgs., l.c.l., t.l.l., dlvd E. lb. .41 - —
Triphenyl phosphate, bbls., c.l., frt equald lb. .41½- —
bbls. l.c.l. frt equald lb. .43½- —
Triphenylguanidine, bbls. works lb. .90 - —
Tripropylene, dms., c.l., dlvd. E gal. .44 - —
dms., l.c.l., same basis gal. .54 - —
tanks, same basis gal. .28 - —
Tripropylene glycol dms., c.l., t.l., frt. alld. E lb. .20½- —
dms., l.c.l., t.l.l., frt. alld. E lb. .22 - —
tankcars and compartmented tankcars, frt. alld. E lb. .17½- —
Tripropylene glycol, tankwagon and compartmented tankwagons, 1,000 gals. min., frt. alld. E. lb. .18 - —
Tripropylene glycol prices 1c. per lb. higher in West.
Trisodium phosphate (see Sodium phosphate tribasic).
dl-Tryptophane, fib., dms., works. lb. 55.00 - —
Tung oil, dms., c.l., New York lb. .23¼- —
dms., l.c.l., New York lb. .23½- .23¾
tanks, imported, N. Y. lb. .21¼- .21⅜
tanks, domestic, mills lb. .21¼ Nom.
Tungsten metal, powd., 2.0-2.5 microns, dms., works lb. 4.25 - —
Tungstic acid, tech., dms., 1,000-lb. lots, works lb. 2.25 - —
dms. smaller lots, works lb. 2.45 - —
Turkey red, bbls. works lb. .62 - —
Turpentine, gum (see Protective Coatings market, Naval Stores).
Turpentine oil, NF, cns. dms lb. .28 - .50
Tuscan red, bbls. frt. equald lb. .26 - .32
Tyrothricin, USP, 1 to 5 kilos gram. .54 - —

U

Ultramarine blue, cobalt type, dry or pulp, 250-lb. bbls., dlvd. E of Rockies lb. .35 - .39½
Jobbing types, bbls., same basis lb. .19 - —
Regular types, dry, bbls., same basis lb. .22½- .35
Ultramarine blue prices 1c. higher W. of Rockies.
Umber pigment, burnt, American, bgs., c.l., works lb. .07½- .07¾
bgs., l.c.l., works lb. .07¾- .08
Turkey-type, bgs., c.l., Boston, Bethlehem, Easton, Pa., Hiwassee, Va., N. Y. lb. .06¼- —
Raw, American, bgs., works lb. .07¾- .08¼
Turkey-type, bgs., works lb. .08½- .08¾
Undecylenic acid, dms lb. 1.28 - —
Unicorn root, false (see Helonias root).
Unicorn root, true (see Aletris root).
Urea, 46% N, indust., bgs., c.l., t.l., dlvd. E ton 125.00 - —
bgs., l.c.l., dlvd. E. ex whse. ton. 145.00 - —
45% N, agricultural, bgs., c.l., (30 tons) dlvd. E ton 103.00 - —
Urea-ammonia liquor, A, B, C & F grades, N basis, tanks, frt. equald ton. 120.00 - —
37 grade, tanks, same basis ton. 145.00 - —
Urethane, USP, dms., t.l., f.o.b., works lb. .65 - —
dms., l.t.l., same basis lb. .70 - —
Uva-ursi leaves, bls lb. .12 - —

V

Valerian root, Belgian, bgs. lb. .32 - —
Indian, bgs. lb. .25 - —
dl-Valine, dms., works lb. 21.00 - 27.50
Vanadium pentoxide, tech., dms., works lb. 1.26 - 1.33
Vandyke brown, bbls., works lb. .09½- .12
Vanilla beans, Bourbon, tins lb. 15.00 - —
Mexican cuts, tins lb. 15.00 - —
whole, tins lb. 15.50 - —
Vanillin, ex lignin, 100-lb fib. dms., 1,000-lb. lots or more lb. 3.00 - —
100-lb fib. dms., 500-lb. lots lb. 3.10 - —
100-lb. fib. dms., cns., 100-lb. lots lb. 3.25 - 3.35
Venetian red, jobbing, bgs., works, lb. .0475- —
Venetian red, 20%, bgs., works lb. .0525- —
25%, bgs., works lb. .0575- —
30%, bgs., works lb. .06 - —
35% bgs., works lb. .0625- —
40% bgs., works lb .0675- —
Vetiver oil, Bourbon, cns. lb. 16.50 -17.50
Haitian, cns. lb. 14.00 -15.50
Victoria blue toner, molybdated, PMA, 250-lb. bbls., dlvd. E. of Rockies lb. 4.50 - 4.95
Tungstated, PTMA, 250-lb. bbls., dlvd. E. of Rockies lb. 5.55 - —
Victoria blue toner, bbls., prices 1c higher W. of Rockies
Vinyl acetate monomer, zone 1, 55-gal. dms., c.l., dlvd lb. .20 - —
55-gal. dms., l.c.l., dlvd. lb. .21½- —
tanks, dlvd. lb. .17½- —
tanktrucks less than 4,000 gal., dlvd lb. .18 - —
Zone 2, 55-gal. dms., c.l., dlvd lb. .21 - —
55-gal. dms., l.c.l., dlvd. lb. .24 - —
tanks, dlvd. lb. .18½- —
tanktrucks, less than 4,000 gals., dlvd. lb. .19 - —
Zone 1 is all continental US except zone 2. zone 2 comprises Ariz., Calif., Idaho, Mont., Nev., Ore., Utah and Wash.
Vinyl n-butyl ether, tech., dms., l.c.l., works lb. .50 - —
Vinyl chloride monomer, tanks, works lb. .125 - —
Vinyl ether, USP, anesthesia, bots., 50cc., hospitals bot. 1.12 - —
bots., 75cc., hospitals bot. 1.56 - —
Vinyl ethyl ether, tech., dms., c.l., works lb. .29¼- —
dms., l.c.l., works lb. .30 - —
tanks, works lb. .27¼- —
Vinyl propionate monomer, cms., c.l. dlvd lb. .49 - —
dms., l.c.l., same basis lb. .50 - —
tanks, same basis lb. .47 - —
Vinyl trichloride (see Trichloroethane).
2-Vinylpyridine, 10 dms. to tanks, works lb. 1.20 - —
1 to 9 dms., works lb. 1.35 - —
tanks, works lb. 1.15 - —
Vinyltoluene dms., c.l., f.o.b., works, lb. .16½- —
dms., l.c.l., same basis lb. .18½- —
tanks, f.o.b. dest. frt prepaid lb. .14 - —
Viosterol, in nat. vegetable oil, 1,000,000 D units per gram, bots., lots of 10 billion USP units 1,000,000 units. 02½- —
Virginia type red, bbls., works lb. 1.40 - —
Vitamin A acetate, syn., cryst., beads 500,000 A units per gram gram .07¼- —
Vitamin A acetate, dry 500,000 units per gram, kilo lots kilo. 65.00 - —
325,000 units per gram, same basis kilo 43.88 - —
250,000 units per gram, same basis kilo 33.75 - —
Dry vitamin A acetate in less than kilo lots, $1.25 to $2.50 per kilo higher.
Vitamin A, liq. in oil, 1,000,000 A units per gram, 1,000,000 units. .09½- —
Vitamin A palmitate, liq., 1,000,000-1,800,000 A units per gram 1,000,000 units. .09½- —
1,000,000 A units per gram, 1,000,000 units. .09½- —
Vitamin B_1 (see Thiamine nyuro-chloride).
Vitamin B_2 (see Riboflavin and Yeast).
Vitamin B_{12}, cryst., USP (cyanocobalamin), 1-50 grams, vials, tons gram 120.00 - —
0.1% vitamin B_{12} USP, adsorbed on gelatin, 100 and 500-gram bots, on 1-5 kilo dms. gram. 1.43 - —
0.1% vitamin B_{12}, USP adsorbed on resin, 100 and 500-gram bots., 1-5 kilo dms gram 1.43 - —
Vitamin B_{12}, oral grade solids, in containers of 1 and 10 gram of B_{12} activity gram. 110.00 - —
0.1 percent trituration of cryst. B_{12} with dicalcium phosphate or mannitol, 1-10 kilo. 138.00 - —
Vitamin B_{12}, 0.1% cobalamin concentrate NF, adsorbed on resin, 500-gram bots., 1-5 kilo dms., frt. alld gram. 1.15 - —
0.1% cobalamin concentrate in gelatin, 1-10 kilo dms., frt. alld gram. 1.15 - —
Vitamin C (see Ascorbic acid)
Vitamin D (see Codliver and Fish-liver oils, Calciferol and Viosterol).
Vitamin D_2, dry, 850,000 units per gram, kilo lots kilo 42.50 - —
850,000 units per gram less than kilo lots kilo 45.00 - —
Vitamin E (see a-Tocopherol and Wheat germ oil)
Vitamin G (see Riboflavin).
Vitamin H (see Biotin)
Vitamin K, active (see Menadione).
Vitamin K_1, 25 gram bots .. gram. 4.50 - —
Violet methyl toner (see Methyl violet toner)
VM&P naphtha (see Naphtha, VM&P, petroleum).

W

Wahoo root bark, bls. lb. 2.00 - 2.25
Warfarin, 0.5%, dms., 50-lb. lots, dlvd lb. 1.95 - —
dms., 25-49-lb. lots, New York or Chicago lb. 2.05 - —
dms., 5-24-lb. lots, New York or Chicago lb 2.15 - —
Watchung-type reds, bbls lb 1.95 - —

WAXES

Wax quotations are listed individually. For example, prices on Wax, carnauba, may be found in the C's under Carnauba wax.

Wheat germ oil, 5-gal. dms .. gal. 12.25 —
White lead (see Lead, white).
White mineral oil (see Mineral oil, white)
White pine bark, rossed, bls. lb. .21 - .22

White precipitate, USP, powd, dms., lb. 6.55 • —
Whiting (see Calcium carbonate).
Wild cherry bark, thin, nat., bls. lb. .22 • —
Thin, rossed, bls. lb. .22 Nom.
Wintergreen oil, USP, nat., northern, cns lb. 6.35 -17.50
USP, nat., southern, cns. lb. 3.75 - 7.00
Wintergreen oil, syn. (see Methyl salicylate).
Witch hazel bark, bls. lb. .16 • .17
Witch hazel leaves, bls. lb. .28 • .30
Wollastonite fine, bgs., c.l., works ton 39.50 • —
bgs., l.c.l., ex whse. ton 56.00 • —
Medium, bgs. c.l., works ton 27.00 • —
bgs., l.c.l., ex whse. ton 44.00 • —
Wood alcohol (see Methanol).
Wood oil (see Tung oil).
Woolfat, crude (see Degras).
Woolfat, USP (see Lanolin).
Wormseed, Levant bgs lb. 2.50 • —
Wormseed oil (see Chenopodium oil NF).
Wormwood oil, cns lb. 4.75 5.00

X

Xylene, coaltar, indust., tanks, works:
Bethlehem, Pa. gal .29 • —
Birmingham dist. gal .29 • —
Chicago dist. gal .28½ • —
Cleveland dist. gal .29 • —
Geneva, Utah gal .29 • —
Johnstown, Pa. gal .29 • —
Lackawanna, N. Y. gal .29½ • —
Lone Star, Tex. gal .27 • —
Lorain, Ohio gal .29 • —
Middletown Ohio gal .30 • —
Minnequa, Col. gal .29 • —
Philadelphia dist. gal .29 • —
Xylene, petroleum, indust., tanks,
Pittsburgh dist. gal .29 • —
Sparrows Point, Md. gal .29 • —
Terre Haute, Ind. gal .29 • —
Youngstown Ohio gal .29 • —
f.o.b. works:
Bayonne N. J. gal .29 • —
Baytown, Tex. gal .27 • —
Charleston, S. C. gal .29 • —
Chicago Ill. gal .28½ • —
Detroit, Mich. gal .29 • —
Houston, Tex. gal .27 • —
Philadelphia Pa. gal .29 • —
Providence, R. I. gal .30 • —
Sewell's Point, Va. gal .28 • —
Wood River, Ill gal .28½ • —
o-Xylene, dms., c.l., works lb. .08 • —
dms., l.c.l. works lb. .09 • —
tanks, works lb. .06½ • —
p-Xylene, dms., c.l., works lb. .20 • —
dms., l.c.l., works lb. .21 • —
tanks, frt. alld. lb. .1645 • —
Xylenol, cryst., 45°-47° C., m.p., dms., l.c.l., works lb. .23 • —
56°-58° C., m.p., dms., l.c.l., works, frt. equald lb. .33 • —
60°-62° C., m.p., dms., l.c.l., same basis lb. .40 • —
Xylenol fraction, b.r. 7°-9° C., dry above 227° C., dms., c.l., same basis gal 1.25 • —
dms., l.c.l., same basis gal 1.30 • —
tanks, same basis gal 1.05 • —
b.r. 7°-9° C., dry at or below 227° C., dms., c.l., same basis, gal 1.35 • —
dms., l.c.l., same basis gal 1.40 • —
tanks, same basis gal 1.15 • —
2,4-Xylidine, tech., dms. frt. alld. lb. 1.15 • —
2,5-Xylidine, tech., dms. frt. alld. lb. 1.20 • —
Xylidines, mixed, o-m-p, dms., c.l., or t.l., works lb. .39 • —
dms., l.c.l., same basis lb. .40 • —
tanks, same basis lb. .38 • —

XYLOL
Xylol quotations, both coaltar and petroleum, may be found under Xylene.

Y

Yara yara oil, cns. lb. 2.15 - 3.03
Yeast, brewers, debittered, USP, Saccharomyces dlvd lb. .27 • —
Yeast, brewers, dry, USP, 50 Int'l B units per gram, 100-lb. dms. lb. .47 • —
USP, 90 Int'l B units per gram, 100-lb dms lb. .52 • —
Yeast, brewers, USP, 200 int'l B units per gram, 100-lb. dms. lb. .56 • —
USP, 300 Int'l B units per gram, 100-lb. dms. lb. .60 • —
Torula, USP, dlvd lb. .18 • —

YELLOW PIGMENTS
Yellow pigment quotations are listed individually. For example, prices on Yellow, benzidine, may be found in the B's under Benzidine yellow.

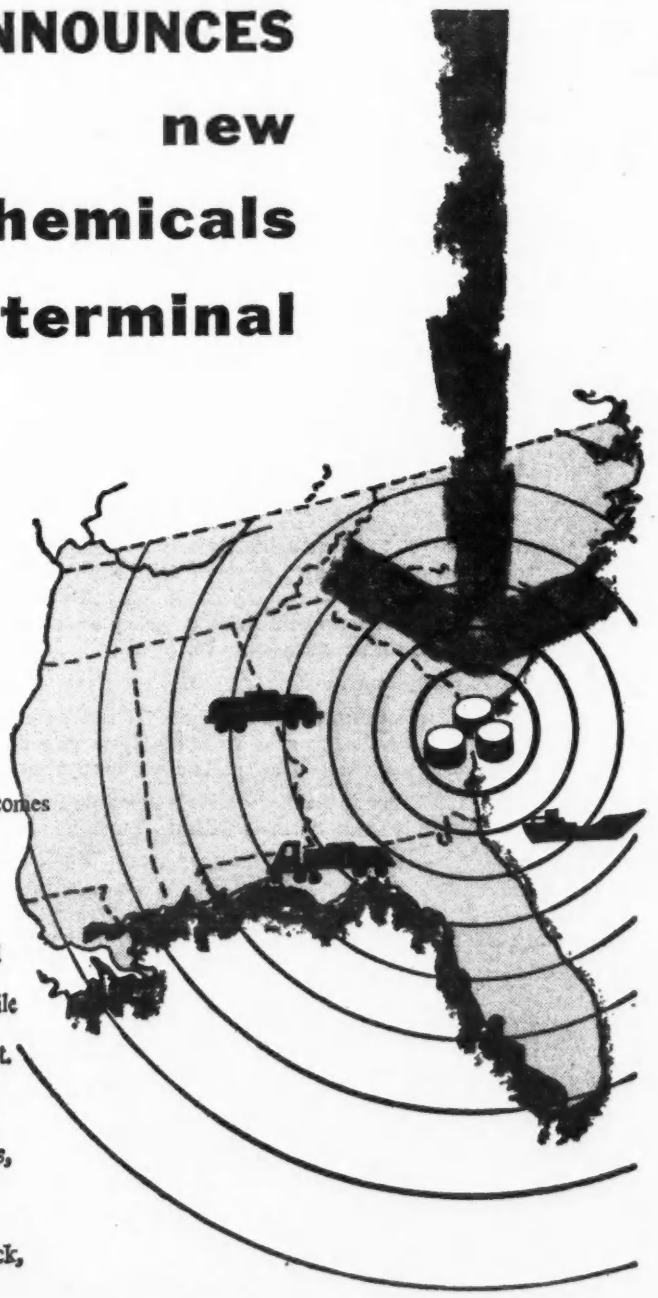
Yerba santa leaves, bls. lb. .40 • .45
Ylang-ylang oil, Bourbon, bots. lb. 7.00 -22.00
extra, bots. lb. 28.00 -33.00
Yohimbine hydrochloride, bots., tins. oz. 3.75 - 4.25

Z

Zein, bgs., 36,000-lb. lots or more, bgs., 500-lb. lots or more, dlvd. lb. .343 • —
bgs., smaller lots, dlvd. lb. .373 • —
Zinc acetate, NF, VIII, dms. lb. .53 • —
Tech., dms., l.t.l., works lb. .29¾ • —
Zinc borate, bgs., 1,000 lbs or more, works lb. .23 • —
bgs., less than 1,000 lbs. same basis lb. .25 • —
Zinc chloride, NF, gran., dms lb. .42 • —
NF, precip., powd., dms lb. .26 • —
Tech. soln., 50%, dms. c.l., works, 100 lbs. 5.50 • —
dms., l.c.l., works 100 lbs. 6.40 • —
tanks, works 100 lbs. 5.15 • —
fused, dms., c.l., works 100 lbs. 10.70 • —
dms. l.c.l. works 100 lbs. 11.20 • —
gran., fib. dms., c.l., works, 100 lbs. 11.45 • —
fib dms. l.c.l. works 100 lbs. 11.95 • —
Zinc chromate bbls., dlvd. lb. .29 • —
Basic, bbls., dlvd. lb. .34 • —
Zinc cyanide, dms., 1,000-lb. lots or more, works lb. .55 • —
dms., smaller lots, works lb. .57 • —
Zinc dust, comt., bbls., c.l., works, lb. .17 • —
Pigment, bbls., c.l., works lb. .16½ • —
bbls., l.c.l., works lb. .18¼ • —
Zinc fluoride, bbls., works lb. .49 • .50
Zinc hydrosulfite, dms., c.l., frt. alld lb. .21¼ • —
dms., l.c.l., frt. alld. lb. .23½ • —
Zinc metal, prime western, slabs, E. St. Louis lb. .12¼ • —
Prime western, slabs, New York, lb. .13 • —
Zinc naphthenate, liq., 8% Zn., dms., frt. alld lb. .27 • —
10% Zn., dms., frt. alld lb. .33 • —
Zinc nitrate, tech., cryst., bbls., works lb. .20 • —
Zinc oxide pigment, American process, lead-free, bgs., c.l., frt. alld lb. .14½ • —
bgs., l.c.l. 10 tons or more, same basis lb. .15 • —
bgs., l.c.l., smaller lots, same basis lb. .15½ • —
leaded, 35% bgs. c.l., mills, frt. alld lb. .15⅝ • —
bgs. l.c.l. 10 tons or more, same basis lb. .15⅞ • —
leaded, 50% bgs. c.l., same basis lb. .15¾ • —
bgs., l.c.l. 10 tons or more, same basis lb. .16¼ • —
bgs. l.c.l. smaller lots, same basis lb. .16⅝ • —
Zinc oxide pigment, French process, green seal, bgs., c.l., mills, frt. alld lb. .16¼ • —
bgs., l.c.l., 10 tons or more, same basis lb. .16¾ • —
bgs., l.c.l. smaller lots, same basis lb. .17¼ • —
red seal, ogs. c.l. same basis, lb. .15¾ • —
bgs., l.c.l. 10 tons or more, same basis lb. .16¼ • —
red seal, bgs., l.c.l., smaller lots, same basis lb. .16¾ • —
white seal, bgs. c.l., same basis lb. .16¾ • —
bgs., l.c.l., 10 tons or more, same basis lb. .17¼ • —
bgs., l.c.l., smaller lots, same basis lb. .17¾ • —
Zinc oxide, USP, dms., c.l., frt. alld. lb. .18¼ • —
dms., l.c.l., 10 tons or more, same basis lb. .18¾ • —
dms., l.c.l., smaller lots, same basis lb. .19¼ • —
Zinc phenolsulfonate, NF, gran., dms lb. .45 • .48
NF, powd., dms lb. .48 • .49
Zinc resinate, precip., 7.2-7.6% zn., dms., frt. alld lb. .40¼ • —
Zinc silicofluoride, dms., works lb. .12½ • .14
Zinc stearate, tech., USP, ctns., c.l., lb. .41 • —
ctns., l.c.l. lb. .42 • .46
Zinc sulfate, powd., monohydrate, 36% Zn., bgs., c.l., dlvd. E 100 lbs. 8.75 • —
bgs., l.c.l., dlvd. E 100 lbs. 9.75 • —
USP, gran., dms. lb. .26 • —
Zinc sulfate in bbls 40c. higher.
Zinc sulfide pure, bgs. c.l., dlvd lb 25 30 • —
Zinc undecylenate, dms lb. 2.00 • —
Zinc yellow (see Zinc chromate).
Zinc-ammonium chloride, ogs., c.l., works 100 lbs. 10.25 • —
bbls, c.l., works 100 lbs. 10.85 • —
bbls., l.c.l., works 100 lbs. 11.35 • —
Zinc-formaldenyde sulfoxylate, basic, 300-lb. dms., frt. alld lb. .26 • —
Normal, 250-lb. dms., frt. alld lb. .52 • —
Zircon (G), gran., bgs., c.l., works, lb. .03¼ • —
bgs., 5 tons to c.l., works lb. .03⅜ • —
bgs., 1 ton to 9,999-lb lots, works, lb. .04 • —
Zircon (G), gran., bgs., smaller lots, works lb. .06½ • —
Milled, bgs., c.l., works lb. .04⅛ • —
bgs., 5 tons to c.l., works lb. .04⅜ • —
bgs., 1 ton to 9,999-lb. lots, works lb. .04⅝ • —
bgs. 500-1,999-lb lots works lb. .07½ • —
Zircon (G) in barrels 1c. higher.
Zirconium acetate, soln., 13% ZrO_2, dms., c.l., 30,000 lbs. min., works lb. .23 • —
Zirconium hydride powd. electronic grade dms., works lb. 14.00 -15.00
Zirconium oxide, CP, white, grd., bbls. or bgs. works lb. 1.50 —
Electric-fused, lump, bgs., 500 to 1,999-lb. lots, works lb. .48½
bgs., smaller lots, works lb. .51 • —
milled, bgs., c.l., works lb. .62 • —
bgs., 5-ton lots, works lb. .62½ • —
bgs., 1-ton to 9,999-lb. lots, works lb. .63½ —
bgs., 500 to 1,999-lb. lots., works lb. .64 • —
bgs., smaller lots, works lb. .66 • —
Glass polishing grade, 94-97% ZrO_2, bgs., works lb. .55 • .65
Opacifier grade, 85-90% ZrO_2, bgs., lb. .27 • .50
Stabilized oxide, 91% ZrO_2, milled, bgs lb. .62 • .85
Zirconium oxychloride, cryst., ctns., 5-ton lots, works lb. .37½ —

DELHI-TAYLOR ANNOUNCES new petrochemicals terminal

CHARLESTON, S. C. FACILITIES TO SERVE THE SOUTHEAST



Close on the heels of expanded production facilities comes Delhi's new Marketing Terminal at Charleston, S.C. for high purity petrochemicals and petrosolvents. The new 2,000,000 gallon bulk storage facilities will insure prompt deliveries of Delhi products to the textile paper, paint and chemical industries in the Southeast. Among the products which will be stored at the new terminal include nitration grade Toluene, 5° Xylenes, Mineral Spirits and Special Textile Solvents. The Delhi Terminal is conveniently accessible by truck, rail, barge and ocean tanker.

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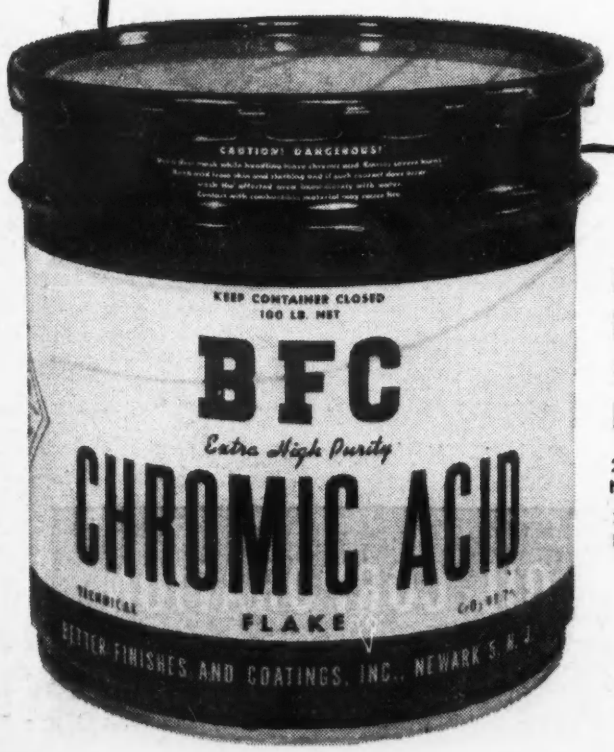

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Heavy Chemicals

Despite the upward creep of costs, symptom of the era's inflationary bias, prices of a broad range of heavy chemicals display a steady tone. It's not too early to have heard of second quarter advances, were any in the works, but none, to date, has been reported. The acids, the alkalis, borax, all have withstood stoutly the prodding prongs of the cost-price squeeze. What's more surprising, many theatres of operations now feature the spluttering fire of price sniping. Conspicuous examples are sulfur, caustic soda, big-volume acids.

Standing apart, trade sources tell OPD, is the situation in sulfur. Whereas price shading of caustic soda and muriatic acid might be described as the intermittent raids of guerrilla forces, transitory waves beating against a sturdy market; the discounts in sulfur, though not reaching all shipping points, do involve all producers, from top to bottom, it is reported.

But it is just as emphatically reported from the trade that the list prices are still in effect, accounting, it is said, for a substantial tonnage of business volume.

Paced by the heady success of compact cars, buoyed up by vast wads of disposable consumer income, Detroit bristles with activity these crucial days, sailing out of the ken of observers toward one of its peak years—a Himalayan year said one observer. And there's hardly a heavy chemical that hasn't profited from the automobile capital's resurgence. To mention one item (small when measured against some materials in this market, but strong nowadays in the market place): Chromic acid.

The wheel, says a spokesman for Detroit, was invented a long time ago, but only now it is coming into its rightful place.

Mercury demand dipped a little last week, but snug supply served to keep prices in place at $211 to $215 a flask, large lots.

The American Paper and Pulp Association reported production for the week ended February 6, at 96.2 percent of theoretical capacity as compared with the revised figure of 95.7 percent for the previous week and 90.1 percent for the corresponding week of last year.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Feb. 13, 1959
106.82	106.82	108.53	104.28

For Current Prices see Page 10

Acids

Boric—There has been very little change in this market the last few months except that since termination of the steel strike it has followed right along with the dizzying upward spiral of the national economy.

Prices are believed to be snugly enough in their pegs right now. Despite the perenial upward creep of costs, there has been no advance since July 1 of last year and none is on the books for the start of the second quarter. As far as supply is concerned, there exists no upward pressure, material being plentiful enough to meet all needs.

Chromic—Chrome plating demand in Detroit, paced by the phenomenal success of the compact cars, has lit a fire under this market. Demand-wise, chromic acid is in the cat-bird seat, trade sources say.

Hydrochloric—Contributing equally to last week's snappy sales clip were steel and chlorinated solvents, both reflecting the heady pace of basic industry.

Turning to prices, the list quotations are described as steady at their long-established levels. At the same time, it is reported, by-product muriatic comes and goes on the market scene, sometimes selling at a discount on large lots, but failing to exert influence where the bulk of business is done.

Supply remains on the plentiful side of balance, but on this side of the long side, trade sources report.

Nitric—Lashed by the preseasonal buying of fertilizer raw materials, further goaded by record-high steel production, backed-up by broadly-based demand in industrial outlets, nitric acid business volume has turned into a runaway proposition this year.

But neither have supplies lagged. In fact, industry sources judge them more than adequate to jibe with all demands. Prices are steady at long-standing levels.

Sulfuric—Steel, biggest gun in the sulfuric market, is firing off vollies, production-wise, as never before.

As estimated by the American Iron & Steel Institute, production last week reached 2,690,000 net tons, or 94.4 percent of capacity, up from the previous week's cerified total of 2,683,000 tons, or 94.2 percent of capacity.

Last month, in the recollection of the Institute, steel output totaled 2,727,000 tons, a year ago 2,371,000 tons.

Bases and Salts

Borax — Sales have been prodded upward by brisk activity in a variety of outlets. Exerting a particularly favorable influence on the market is booming output of automobiles which has acted to step up demand for headlight and window glass.

Fiber glass and ceramic outlets in general are reported to be moving along with zip.

Unchanged for many months are the supply and price pictures. Material has been plentifully available without leaning too far to the long side, and quotations have been broadly steady since the last across-the-board advance was posted—on July 1 of last year.

Caustic Soda—OPD has heard reports of discounts by re-sellers amounting to about ten percent off of list. Checking with major producers, the publication has learned that list prices are unchanged and steady.

It is felt that the discounts probably represent large lots of by-product material from chlorine operations. That the cheap material will be available for very long is seriously doubted by competent trade sources.

Turning to the market picture in general, sources note week-by-week increments in business despite the fact that with the turn of the year sales had already moved up to a high level.

As long as the heart of the nation's economy — steel, automobiles, construction — is pounding at this steady beat, caustic soda won't go a-begging for markets, it was said.

Fluorspar—Shipments of fluorspar in 1958 were valued at $20 million, reports the Census Bureau. This was an increase of 29 percent over 1954, year of the last compilation.

Value added in mining, Census says, amounted to $12,617,000 as compared with $4,914,000 in '54.

Sulfur—In many cases, the prices listed in OPD will range $3 to $4 higher than those prevailing in actual trade. This is due to continued widespread shading. Major producers have told this publication that the list prices still represent their idea of "what the price is" although they are meeting competition wherever it arises.

In contrast to the clumsy price situation, producers have nothing to complain about in respect to business volume. Last year brought a brilliant market performance, reversing the steady-to-downward trend of the previous two years, and with Detroit making one of its biggest noises ever, rubbermaking sales stand to set a new record-high this year. Nor will other outlets lag, trade sources say.

Nonferrous Metals

Aluminum — Shipments of sheet and plate rose smartly in December, totaling 121,632,000 pounds, up from November's 106,152,000 pounds, making for a 1959 overall total of 1,507,669,000.

In other data from the Aluminum Association, December shipments of foil were tallied at 17,852,388 pounds, down slightly from November's 18,408,319

Heavy Chemicals

pounds, carrying the year's total to 241,197,833.

In other data—this time supplied by the Census Bureau—net shipments of aluminum mill products in November amounted to 247 million pounds, down 14 percent from October's 287 million.

Shipments of aluminum ingot — both primary and secondary—during the month totaled 124 million pounds, down two percent from October's 127 million, Census says.

Copper—The first shipment of blister copper has just been unloaded from the new Ilo, Peru mine. On completion this May, the facility will produce 11,600 tons of material a month. Preliminary production began in January.

The new facility is jointly-owned by four firms, a controlling interest in the hands of one major American smelting company.

Deposits at the mine are estimated at a billion tons, said to comprise one of the largest reserves in the world and to include undeveloped deposits at nearby Quellavaco and Cuajone.

Overall, cost of the project has been tabbed at $235 million, including several massive engineering projects, such as deepening and broadening the harbor at Ilo and laying a 114-mile railroad some 10,000 feet into the Andes.

Nickel—Free world consumption of nickel in 1959 exceeded 400 million pounds, up 25 percent from '58's 320 million.

That's the gist of the latest report from one of the industry's leading producers.

In the US, he added, consumption jumped a full 35 percent, paced by stainless steels.

Here's his percentile break-down of free world consumption by end-uses: Stainless steel, 29 percent; high-nickel alloys, 16; electroplating, 15; nickel alloy steels, 15; foundry products, 12; copper-nickel alloys, 4; and all others, 9 percent.

Looking further ahead, the producer finds tremendous potential for nickel in the gas turbine field.

While gas turbine-powered trucks and passenger cars are emerging from the prototype stages, he says, the temperatures and stress requirements of the metals involved in these experimental models as compared with conventional designs are such that several times as much nickel per engine may be required.

Mercury—Business is reported rather quiet, not up to seasonal par. In some quarters it is felt that consumers are holding out for prices below the present $211 to $215 a flask for large lots. But the possibility of a decline is none too strong, it is said,. owing to light arrivals here. Last week, there was not shipment from Mexico, only a few lots from Trieste.

Silver—Quotation has been long unchanged at 91^{3}sc. a troy ounce, spot.

Tin—Against moderate sales, quotation held unchanged at $1.01 per pound, spot.

Zinc—Buying interest still spotty, price steady, supply adequate.

January production of slab zinc totaled 73,326 tons, reports the American Zinc Institute. Domestic shipments totaled 79,325 tons, exports 3,949 tons, for an overall total of 83,274. Stocks started the month at 154,419 tons, closed at 144,471.

Items:

- January total was up sharply from December's 69,666 tons.
- Output included 32,729 tons of special high grade, 3,511 tons of high grade, 610 of intermediate and 36,476 of prime western (including select and brass special).
- Daily average production was at 2,365 tons.

Color Migration Study

—Continued from page 4

tion and the National Paper Board Association.

The interest in the possible migration of dyeing materials stems from the color additives legislation now getting a big play in congress.

Both the chemical people and the paper products makers are fully aware that if the legislation is passed the federal government will probably place strict controls on the use of colors in packaging materials for foods and even for drugs and cosmetics.

Food & Drug Administration has said it would be interested in receiving from the two groups any technical data submitted on an industry-wide basis and in discussing them.

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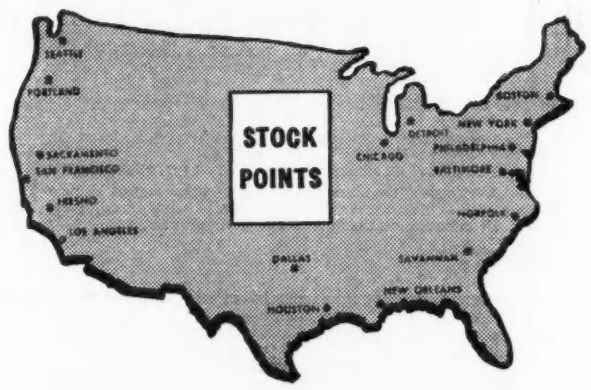

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Data Offered

Armour Industrial Chemical Company has published a new booklet on **cationic chemicals as conditioners for hygroscopic salts and fertilizers.** Copies are available from the company's headquarters at 110 North Wacker Drive, Chicago 6.

Eastman Chemical Production, Inc., has issued a new booklet on its **polymeric plasticizer "NP-10,"** available from its Kingsport, Tenn., offices. Performance data are presented showing the effect of plasticizing polyvinyl chloride with varying amounts of "NP-10," both in plastisol and plastic formulations. "NP-10" hydrolysis stability tests and the viscosity stability of several plastisol blends on ageing are given in graphic form. In addition, the bulletin contains a table listing the compatability of "NP-10" with the major commercial resins.

Ansul Chemical Company has issued a new folder, "Chemicals for '60," which offers eleven different chemicals in development quantities and twelve chemicals in commercial quantities. Copies are available from the company at Marinette, Wis. Fields covered by the booklet comprise **nitrogen heterocyclics, organic arsenicals and methylated products.**

Chas. Pfizer & Co., has issued Technical Bulletin No. 102, **"Pfizer Products for Chemical Cleaning."** Copies are available from the chemical sales division at 630 Flushing avenue, Brooklyn 6, N. Y.

Hercules Powder Company has issued a new basic technical booklet on **fatty acids from crude tall oil.** Copies are available from the company at Wilmington 99, Del.

Borden Inks in Plans

—*Continued from page 5*

changes in personnel are planned, Borden says.

Commercial Ink & Lacquer Company was founded in 1946 by George E. Jacques, now president, and George B. Grupe, vice-president.

The unit manufactures gravure and flexographic inks, varnishes and lacquers for use by the packaging, gypsum board. printing, and laminating industries.

No details of the terms of acquisition were disclosed by either company.

House Okays $90 Million For Water Pollution Control

A compromise water pollution control measure, authorizing the federal government to spend $90 million a year for a decade, has been approved by the house and sent on to the senate.

The government is presently empowered to spend at a $50-million-a-year rate. Both the administration and the chemical industry wanted the nation's water pollution control program continued on its present basis.

However, the house had other ideas, originally authorizing the expenditure of $100 million annually. The senate was only slightly less generous, choosing an $80-million figure.

The house version passed last week split the difference right down the middle. The new authorization legislation also increases the maximum amount the federal government may spend on any one water pollution venture from $250,000 to $450,000, or to 30 percent of the total value of the project, whichever is less.

Newport Advances Spitz

Newport Industries Company, New York, a division of Heyden Newport Chemical Corporation, has advanced S. J. Spitz, jr., to the post of executive vice-president. With the division since 1946, when he was taken on as an engineer, Mr. Spitz was named a vice-president in early 1959.

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Pitts. Plate Glass Picks New Members for Board

Pittsburgh Plate Glass Company has elected Robinson F. Barker and James F. Junge as members of its board of directors. They will fill the positions left vacant by the death of C. Robert Fay and the recent resignation of Howard B. Brown.

Mr. Barker, vice-president and general manager of the glass division, has been associated with the Pittsburgh, Pa., company since 1935. Mr. Junge is director of investment research and a member of the board of directors of Pitcairn Company. He is also a director of Commonwealth Oil Refining Company of Puerto Rico.

Gov't Rests Oil Case

—Continued from page 5

category: Standard Oil Company (New Jersey) which owns only 88 percent of Humble Oil & Refining Company; and Cities Service Company, which owns 51 percent of Arkansas Fuel Oil Corporation.

Earlier in the week, officials of Continental Oil Company took the stand and flatly denied prior knowledge of the price rise posted by Humble on January 3, 1957.

The companies, accounting for nearly all oil sales east of the Rockies, are charged with having conspired to raise prices, in violation of the antitrust laws, in late 1956—time of the Suez crisis.

Charles A. Perliz, jr., executive vice-president of Continental, said that company officials had not discussed price changes in either crude oil or refined products with outside companies before Humble's price announcement.

Under cross-examination by counsel for Conoco, Mr. Perlitz explained the contents of a telegram that had been offered in evidence by the government.

An inter-company communication, the telegram at one point referred to making contact with a Gulf Oil Corporation official.

While most of the telegram concerned crude oil matters, Mr. Perlitz explained that reference to a Gulf official involved a joint pipeline venture of Gulf and Conoco.

Henry J. Kennedy, senior vice-president in charge of marketing for Continental, testified that he did not hear of Humble's price advance until the afternoon of January 3—the time it was posted. At that time, he said, he called on the marketing department to prepare data looking toward a comparable price increase.

He said that he thought Conoco management would consider matching the price advance initiated by Humble.

Bids Wanted

Asphalt, cutback, MC-3, 70,000 gals., and asphalt RC-3, 50,000 gals., Bid ORD-39010607B, Feb. 25. Delivery to start approx. May 15, thereafter as requested. U.S. Army Ordnance Depot, Black Hills, Igloo, South Dak.

Coating Compounds, 20,300 lbs., plastic, spec. purchasing description 8030-101A, Bid IFB 155-2360-60B, Feb. 25; 118,200 lbs., scale removing, abridged interim spec., Bid IFB 155-2284-60B, Feb. 24; 3,025 gals., boiler compound, commercial spec., IFB 155-2308-60B, Feb. 24, 64,275 gals., Coating compound, Spec. MIL-C-15328A with GSSO spec. exception 8030-302, IFB 155-2322-60B, Feb. 28. General Stores Supply Office, 700 Robbins Ave., Philadedphia 11, Pa.

Cleaning Compound, 14,905 gals., Spec. MIL-C-22230 (Ships), Bid IFB 155-2276-60B, Feb. 24, General Stores Supply Agency, 700 Robbins Ave., Philadelphia 11, Pa.

Drugs, 2,592 bots., Norethynodrel Tablets 500S, Bid RFP 5949Q, Feb. 16; 240,000 bots., Streptomycin Sulfate, Bid IFB 32-143-60B, Feb. 19, Military Medical Supply Agency, 29th St. and 3rd Ave., Brooklyn 32, N.Y.

Fertilizer, 250 tons, sulfate of ammonia, 21%; muriate of potash, 60%; Christmas Island rock phosphate, 38.5%; bids invited until April 30, by the Agricultural and Rural Development Corp., 459 Prome Road, Rangoon, Burma. Bidding instructions, specifications and other pertinent data are available for review on loan from the Trade Development Division, Bureau of Foreign Commerce, U.S. Department of Commerce, Washington 25, D.C.

Paint Products, 87 items consisting of enamel, lacquer, paint, primer, floor sealer, and wood filler, Bid, IFB 10301, Feb. 25, Business Service Center, General Services Admin. Bldg. 41, Denver, Federal Center, Denver 25, Colo.

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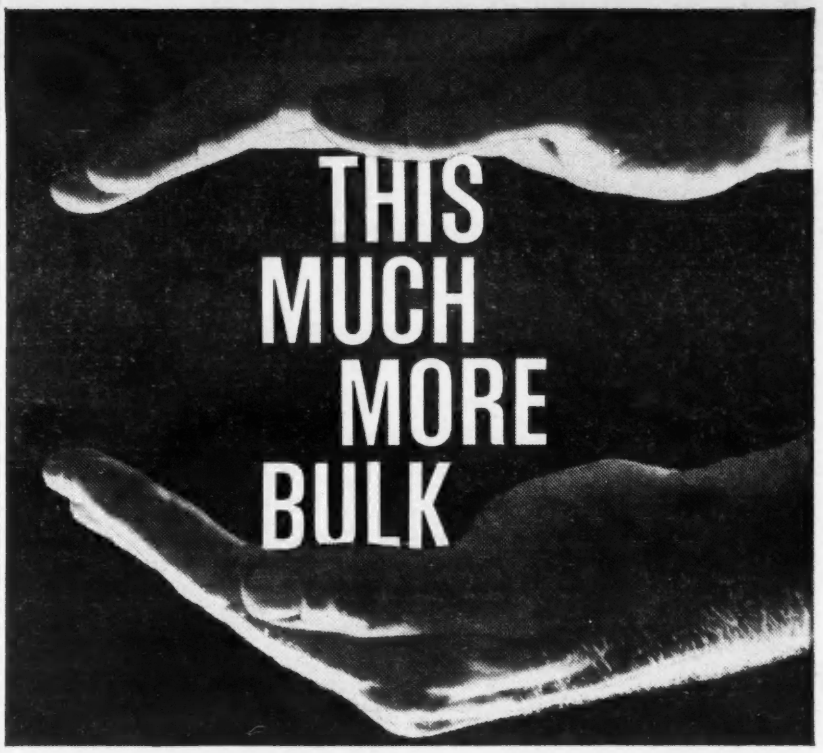

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Jobs & People

Atlas Powder Company, Wilmington, Del.—**Max E. Colson** has been elected vice-president and put in charge of the company's explosives division.

Catalin Corporation of America, Chicago, Ill.—**John N. Guidice** has been named a sales representative for the resin and chemical division.

Colton Chemical Company, Cleveland, Ohio, a division of Air Reduction Company—**Charles P. Albus** has joined the company's polymer research group.

E. I. duPont de Nemours & Co., Wilmington, Del.—**Joseph L. Gillson,** chief geologist of the development department, will retire at the end of this month.

Fallek Products Company, Inc., New York—**Curtis L. Hereld,** formerly of Chemo Puro Manufacturing Company, has been named vice-president.

Hooker Chemical Corporation, Niagara Falls, N.Y.—**John F. Ortner** has been advanced to product manager of molding compounds in the sales department of the Durez Plastics Division.

Michigan Chemical Corporation, St. Louis, Mich.—**E. Russell Leach,** formerly product manager of industrial and pharmaceutical chemicals, has been named sales manager.

Monsanto Chemical Company, St. Louis, Mo.—**H. P. Walmsley,** manager of pricing for the inorganic chemicals division, will retire March 1.

Nalco Chemical Company, Chicago, Ill.—**Clyde V. Byers** has been named district manager in Anaco, Venezuela, for Nalco de Venezuela, C. A.

National Aniline Division of Allied Chemical & Dye Corporation, New York—**William F. Ferrazano** has been named product manager of textile dyes.

Olin Mathieson Chemical Corporation, New York—**Warren P. Turner** has been named product manager for military products and solid propellants for the company's energy division.

Schering Corporation, Bloomfield, N.J.—**Dr. Edward Henderson** has been appointed to the newly-created position of vice-president for medical affairs.

Stauffer Chemical Company, New York—**J. Howard Zeh** has been appointed manager of the company's Woburn, Mass., plant.

Union Carbide Plastics Company, New York, a division of Union Carbide Corporation—**Donald T. Smith** has been appointed technical sales representative in the New England region.

Color Additives Hearings

—Continued from page 3

or 'technical' effect of a color additive is to impart color.

"Whether or not that color is a desirable one is a question to be determined in the first instance by the manufacturer and, in the final analysis, by the consumer. It requires no administrative pre-judgment of any complex question of utility."

What Secretary Could Do

He also said that the legislation "seems to us to confer upon the secretary vast power to decide which articles are marketable and which are not, and to decide which industry needs a color and which does not, and to change his mind from time to time without any recourse from the industries affected or from the hapless consumer.

"In our society, such decisions of economic preference belong solely to the interaction of buyers and sellers in the market place."

Mr. Gerden also attacked the Delaney anti-cancer clause in the bill and was joined in this by Dr. Thomas P. Carney of Eli Lilly & Co., speaking as chairman of the PMA committee for the study of carcinogen substances.

They related to the comittee how the Delaney clause is operating to prevent the use of substances which are only suspected of being cancer producers.

Furthermore, Dr. Carney said, the clause is already having its deterrent effect on research programs in the drug industry and elsewhere and cited several examples where research has been halted completely simply because it is conceivable that the products might come under the Delaney clause.

Mr. Bergen told the committee that the cancer clause should be limited to demonstrated carcinogens, lest a widespread fear be created that ingredients ordinarily considered safe, are unsafe.

If the flat ban is to be applied on the basis of remote implications for inconclusive scientific reports, he added, the following substances may have to be eliminated from our food supply as carcinogenic: coffee, tea, milk, cream, cocoa, claret, fat, vitamins, eggs, and sugar.

The two drug company spokesmen urged a modification of the clause so as to provide some degree of discretion in banning the use of carcinogens. A similar position was taken by the PMA in its letter to the committee.

Cite Technical Changes

After citing a number of technical changes which seem needed in the bill to make it conform to its original objectives, Mr. Dunkelberger wound up his testimony for the food canners with these recommendations:

- Redefine "color additive" to mean those substances that are "artificial colorings" as defined in the curent FDA regulations, except that the term shall not include substances used primarily for purposes other than coloring, or substances generally recognized as safe for use. All ingredients used in foods that are not covered by this definition would have to meet the tests provided in the food additives amendment.
- Remove all references to economic determinations by the Secretary, and limit the bill to the question of public health.
- Provide procedural safeguards for provisional listing of colors pending their clearance for safety.

Chlorine-Caustic Facility Is Being Erected in Egypt

Misr pour les Produits Chimiques SA is putting up a $5.7 million chlorine-caustic plant in Alexandria, Egypt.

According to the Cairo company, the installation will have an initial production capacity of 20,000 tons of caustic soda and 17,500 tons of chlorine a year.

However, the Egyptian concern envisions a tripling of the plant's capacity within the foreseeable future.

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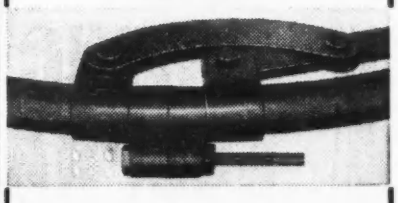

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Agricultural Chemicals

Shipping season for fertilizer chemicals is under way but it'll be another few weeks before deliveries approach what the trade calls "volume." A gradual pick-up is expected, however, provided the weather is favorable in areas, principally the Southeast, where planting has already begun. Outlook for the season is very optimistic. Poor off-season movement and lack of a fall application of fertilizer—because of excess moisture—sources say, will likely boost spring requirements to record-high levels. Only negative aspect is that local or spot shortages will develop if delivery requests come in one big rush, tieing up all available carrier space.

Department of Agriculture economists predict that by 1963, farmers cash income would be $2.8 billion less than in 1958 if most product controls were removed and price supports set on market-average bases. Farm cash receipts in '58 totaled $33.6 billion.

Requested by Sen. Proxmire (D., Wisconsin), the USDA study shows what would happen if Administration farm proposals are followed.

In making the study, the USDA economists assumed that all controls excepting tobacco quotas would be dropped. And reasoning that some transition would be built into such a program estimated that 1960 farm cash receipts would be $31.8 billion; the same in 1961; $31.5 billion in 1962, and $31.4 billion in 1963. Without transition, 1963 receipts would drop to $30.8 billion, they said.

The Agricultural Bank of Greece is shopping for an estimated $10 million worth of agricultural chemicals. Included in the Bank's bid invitation are 87,000 tons of nitrogenous and 35,000 tons of phosphate fertilizers; 80,000 tons of ammonium sulfate and 7,000 tons of potassium sulfate. Bid deadline is February 16, according to the Commerce department announcement.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Feb. 13, 1959
110.64	110.64	110.98	112.42

For Current Prices see Page 10

Animal and Plant Foods

Ammonia — December exports of anhydrous and aqueous ammonia for fertilizer use totaled 19,183,011 pounds, valued at $670,554. Buyers were Mexico (16,363,190 pounds), Cuba (2,559,221 pounds), Liberia (235,500), and the Philippine Republic (20,100).

The same month, exports of ammonium nitrate were 24,998,596 pounds, valued at $757,789. Biggest quantities went to Korea (21,893,946) and Mexico (2,700,000).

Ammonium sulfate exports totaled 75,828,993 pounds and were valued at $1,199,197. Spain, taking 47,876,380 pounds, was the largest single purchaser. Other buyers were Korea (22,051,440), Columbia (4,409,200), Mexico (847,621), Cuba (444,400), and Honduras (199,957).

Fears of an ammonium sulfate supply shortage are no more. And while the setting of the steel strike, assuring the availability of by-product sulfate, dispelled these fears, there is another, and perhaps more important factor, according to a report of last week. This is that fall movement was so under par that producers were left with big stocks.

Producers' stocks of other nitrogen chemicals are also large. Thus, no shortages are envisioned as the season progresses. Buyers are cautioned, however, to call for early delivery. At the height of the season, carrier space will probably be at a premium and spot shortages are likely to develop. This, of course, has been the situation in other years. But it should be aggravated still further this season by the lack of sufficient inventories at mixer and dealer levels.

Pesticides Output

Following are production statistics reported by the Tariff Commission representing the number of pounds of certain pesticides produced during October and November, 1959:

	November	October
DDT	12,011,921	13,199,404
2,4-D*	3,350,270	3,443,579
Ester & Salts	2,294,467	**4,829,669
Acid equivalent	1,638,541	**3,608,488
BHC	2,248,306	1,919,530
Gamma isomer	529,121	522,905
Tetraethyliuram sulfides	609,170	534,292
2,4,5-T	—	268,820

*Includes 2,4-D acid produced, separated and consumed in plant in the manufacture of its derivatives.
** Partly estimated.
A dash (—) indicates information was not available.

Calcium Phosphate Dibasic—November production was 22,771 short tons, lower than October (24,828) but slightly above November, 1958 (21,253).

Despite the decline in output, stocks at November's end were up substantially, to 6,854 tons from 4,436 on October 30. This increase apparently reflected the drop in consumption in animal feeds.

Throughout much of the nation this winter, feed business has been dismally slow. Cold and snow in the Pacific Northwest states pepped up sales in January but recent milder weather has relaxed demand there.

An overproduced poultry industry, fighting record-low egg and broiler prices, has reduced its feed demands.

Mild weather in the Ohio Valley has resulted in a minimum of indoor feeding.

On the credit side, recent improvement in hog returns has bolstered hog feed volume. Cattle feed business is said to be fair.

Lime — Domestic sales of open-market lime were 824,579 short tons in November, up from 681,184 tons in October and 692,703 tons in November 1958. Cumulative total for the first ten months of the year was 8,309,213 tons, against 7,017,443 tons during the comparable period in '58.

But while sales, overall, increased, sales to agricultural users declined in November to 5,819 tons from 9,797 in October and 8,951 in November 1958. January-November sales were also lower at 156,772 tons (1958: 161,338 tons).

Nitrogen Solution — November production of nitrogen solutions (including combinations with urea) was 64,742 short tons, way above November 1958 output (53,721 tons) and slightly above October, 1959 (64,531 tons).

On November 30, stocks totaled 54,837 tons, according to the Census bureau report. A month earlier, stocks were 43,320 tons.

Pesticides

BHC—According to the Census bureau, December exports of technical (and from 6 percent gamma isomer) benzene hexachloride amounted to 258,903 pounds, valued at $208,537. Brazil bought most of this—138,388 pounds; Mexico took 46,468.

Confined pretty much to use on cotton, BHC doesn't come in for strong interest until late winter. Buying then continues through May.

Price schedules were revised late last year to reflect direct sale as well as consignment-based listings.

On direct sale, low gamma BHC is listed at .056c. per gamma unit in bags and at .050c. in bulk for carload or truckload quantities, f.o.b. works. On consignment, the same material is listed at .075c. per unit in bags and at .072c. in bulk, delivered.

DDT—December exports of technical DDT amounted to 930,760 pounds, valued at $204,012. Among the major buyers were Canada, which took 616,000 pounds, The Philippine Republic (151,000), and New Zealand (71,700).

Outshipments of 20 to 74 percent DDT formulations in December totaled 215,812 pounds, valued at $128,966. Receiving more than 5,000 pounds were France (130,150); Columbia (129,000); Cuba (299,688), and Iran (5,500).

The same month, exports of 75 percent (and over) DDT formulations were 5,530,014 pounds, valued at $1,892,562. Large amounts went to Iran (1,473,300 pounds); Columbia (887,175); Vietnam (751,500); Philippine Republic (632,302); Mexico (582,150); Salvador (400,000), and Brazil (321,300).

Endrin — The price schedule for this widely-used pesticide has been revised. On a 100 percent basis, the technical material is now listed at $2.70 a pound for orders of 100 pounds or more, delivered.

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Aliphatic Organics

Aliphatic chemicals markets were quiet, pricewise, last week subsequent to the 23 cents per pound decline in succinic anhydride two weeks ago. The domestic molasses market held after weakening in previous weeks due partially to large sale of Cuban molasses. At the beginning of February, the Cuban Sugar Stabilization Institute announced sale of 81.8 million gallons of blackstrap which remained unsold from the 1959 campaign. In general, sales volume in these markets has continued spotty in the initial weeks of February as was the case last month. Again, though, it is pointed out that industry expectations may have been unduly high.

The Alcohol and Tobacco Tax Division of Internal Revenue Service reported a breakdown of uses of specially denatured alcohol for the fiscal year ended June 30, 1959. Use of new alcohol as a solvent amounted to about 63.8 million gallons, while use in the production of other chemicals was 190.8 million. Total new alcohol used for all purposes was 254,687,376 gallons. Recovered alcohol used during the year amounted to 131,762,927 gallons.

A producer reported recently that the company's 45-million pound west coast formaldehyde plant would be located on a 27-acre site at Fremont, Calif. The unit is slated for completion by the end of this year.

November production of glycerine substitutes (ethylene and propylene glycols and pentaerythritol) amounted to 115.6 million pounds, according to a report compiled by the Association of American Soap and Glycerine Producers. Of the total, ethylene glycol production amounted to 99.1 million pounds, while propylene glycol output was 10.9 million and pentaerythritol production was 5.6 million pounds. The November, 1959, production total was 14.6 million pounds more than the 100.8 million pounds of these materials turned out in the comparable month of 1958.

Acetic Acid—The market remains routine. Production levels have been fairly well maintained, although output dipped slightly toward the end of the year.

Textile demand has been fair to good, with January sales termed "spotty overall." Supplies are fully adequate for trade requirements.

Acrylates—As with many another group of aliphatic organic chemicals these days, overcapacity has become something of a problem in acrylate markets. Trade observers estimate the latest addition to capacity, slated to come into the market this month at Freeport, Tex., as being about 15-18 million pounds per year. Total industry capacity is about 85 million pounds with consumption not exceeding 50 million pounds.

End-use patterns range from paints (largest outlet) through fibers and textiles and paper products. Ethyl acrylate is reported to be the most important acrylate ester due primarily to attractive price level.

Acrylonitrile—Price is unchanged at 23c. per pound in tankcar quantity, on freight equalized basis. Trade observers have continued to report moving a good volume of material, although the pace has fallen off somewhat from last month.

Textile and synthetic rubber demand has been brisk. New developments in cyanoethylation of paper products holds good potential, sources say. It is felt that the substantial reduction in this market during the past year could be the basis for further expansion of market outlets for acrylonitrile copolymers.

Butadiene—Movement to the synthetic rubber industry, which forms by far the bulk of this market, continues to reflect the uptrend in the automotive industry. Initial sales of new cars have been less than anticipated in some quarters, but most sources are still optimistic that a 6.5 million unit year is possible.

Overcapcity, a big problem in butadiene during recent years, will not disappear overnight, but operating rates have improved markedly from the 60-70 percent reported in the '58 recession year.

Other outlets have continued to grow steadily. Use in the production of adiponitrile, as an intermediate to nylon, remains as the second largest outlet. However, alternate routes to nylon are by way of competitive materials such as cyclohexane, furfural and benzene. The apparent willingness of nylon producers to slug it out with rayon gives observers cause to hope that nylon may crack the new equipment market in the automotive industry.

Uses for butadiene, other than in synthetic rubber, have been slow to develop. Ready availability and price stability are pointed out as factors which should encourage new uses. Price is unchanged at 14½c. per pound, delivered, in tankcar quantity.

A major nylon producer reported that capacity for nylon 6/6 tire, carpet and industrial yarns would be raised 50 percent. It is reported that 90 percent of the nylon tire cord market is held by nylon 6/6. The company currently manufactures nylon 6/6 at a plant in Pensacola, Fla. The unit has a capacity of 114 million pounds per year. An additional facility at Greenwood, S.C., now building, has a planned capacity of 10 million pounds annually.

A basic chemical producer will build a 12-million pound per year nylon 6 plant in Williamsburg, Va. The unit will turn out filament yarn, particularly for use in tire manufacture. Caprolactam for the unit will be supplied by an associate firm in Freeport, Texas.

Caprolactam—Some sources express the belief that consumption of carpolactam in the production of nylon 6 fiber and molding powder could run to more than 100 million pounds in the next five years.

Material is currently priced at 49c. per pound in tankcars. New capacity is expected to come on-stream in the third quarter of this year. The added capacity makes it probable that some overcapacity will be prevalent during the next few years. However, growth prospects for the material are bright, sources say.

Dicyclopentadiene—A recent addition to the price section, this material is listed at 12c. per pound in tanks, 14½c. per pound in carload of drums and 14¾c. per pound. Prices are on an f.o.b. works basis.

A derivative, dicyclopentadiene dioxide, is reported to be finding use in epoxy resins in combination with glass fibers. The dioxide, when combined with glass fibers, is said to produce a laminate capable of withstanding temperatures up to 600 degress F. In some formulations tensile strength is reported greater than that of steel.

The new laminate will be used in printed circuit boards, automotive parts, piping and aircraft. Truck cabs, auto bodies,

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Feb. 13, 1959
132.54	132.54	132.86	130.67

For Current Prices see Page 10

Glycerine Statistics: December

The following statistics are compiled from monthly report of the Association of Soap and Glycerine Producers. Figures are reported in thousands of pounds and in terms of absolute glycerine (100% basis).

	Dec. 1959	Dec. 1958	Total 1959	Total 1958
Production	24,000	20,900	267,700	213,300
Imports	900	1,000	10,400	17,900
Exports	3,300	1,100	21,400	17,300
Stocks (end of month)	57,900	53,200	57,900	58,300
Disappearance	18,100	19,500	257,200	236,600

Aliphatic Organics

and home appliance shells could be made from the material, it is said.

Epichlorohydrin — Movement to the epoxy resins outlet is routine, sources report. Less captive use of this material has made more epi available to the open market and made possible price reductions. Last change was a 3c. per pound drop at the beginning of November, 1959.

A major producer of epoxies feels the problem of materials handling in the building trades has been partially whipped by the invention of epoxy spray guns which have overcome pre-cure effects, uncontrolled reactivity, limited pot life and the resins' fast reaction time. The development opens the way for a boom in epoxies in the construction field, the company says.

The same firm reported construction of a 40,000 pound capacity epoxy-glass fiber cargo carrier. At 2,800 pounds, the carrier is said to be lighter than a comparable aluminum container.

The wide range of epoxies available has continued to increase the potential for these materials. The resins are condensation products of epichlorohydrin and a dihydric phenol; may rang from liquids to solids depending on the ratio of epi to phenol.

Ethyl Alcohol—The Alcohol and Tobacco Tax Division of Internal Revenue Service reported uses of specially denatured alcohol during the fiscal year ended June 30, 1959. Following figures refer only to new alcohol used during the year.

Use as a solvent in the production of cellulose resin and related products amounted to 7,072,358 wine gallons; solvents and thinners for cellulose, shellac, resin products, etc., 24,328,917 wine gallons; toilet preparations, 10,361,710 gallons; processing industrial, food, drug and other products, 7,712,699; pharmaceutical products for external use, 3,842,827; cleaning, preserving and flavoring prepartions, 10,620,196 wine galolns.

Use as a raw material in the production of other chemicals totaled 188,757,805 wine gallons with aldehydes in this classification taking 138,136,984 wine gallons. Production of vinegar took 10,299,820 wine gallons; acetic acid, 4,755,456; ethyl acetate, 7,426,488 wine gallons and other ethyl esters, 7,068,876 wine gallons. Production of glycol and other ethers accounted for an additional 6,643,394 wine gallons.

2-Ethylbutanol—Price is unchanged at 28c. per pound in tanks, 30c. in carloads of drums and 30¾c. per pound in less carload drum lots. Listing is f.o.b. shipping point.

Morpholine—A chemical producer recently announced that a new process for the production of morpholine would be tested in batch and continuous processes at the company's newly-acquired Conroe, Tex., works. On-stream date for the unit is set for the middle of this year.

The company reports it is set to concentrate on specialty products at the new plant. After the morpholine operation is underway, the company expects to start production of intermediates for the polyurethane resin industry. Also on deck is a plan for production of a group of specialty surfactants.

The acquisition is another step in the company's long range plan for expansion and development of ethylene and propylene oxide derivatives.

Succinic Anhydride—The market was unchanged after the 23c a pound reduction of two weeks ago. The decline in this market set truckload price at 51c. per pound while less truckload quantity is 52c. Prices are on a delivered basis.

Obituaries

Arthur V. Wilker

Arthur V. Wilker, retired vice-president of Union Carbide Corporation, died February 7 in Santa Barbara, Calif. He was seventy-one years old.

Mr. Wilker, founder and former trustee of Carbide's educational fund, was elected a vice-president of the company in 1945 and served in that position until his retirement in 1953.

His association with Carbide began in 1910 when he joined National Carbon Company as a chemist. He left in 1913 to accept a university appointment. Rejoining the firm five years later, he was named plant superintendent, then works manager, vice-president and president.

W. F. Humphrey, president of Tidewater Oil Company and its predecessor companies from 1927 until his retirement in 1953, died February 3 in San Francisco. He was eighty-six years old.

Harold Lee Rogers, retired manager of applied engineering for Air Reduction Sales Company, New York, died February 4 in Bloomfield, N.J. He was seventy-four years old.

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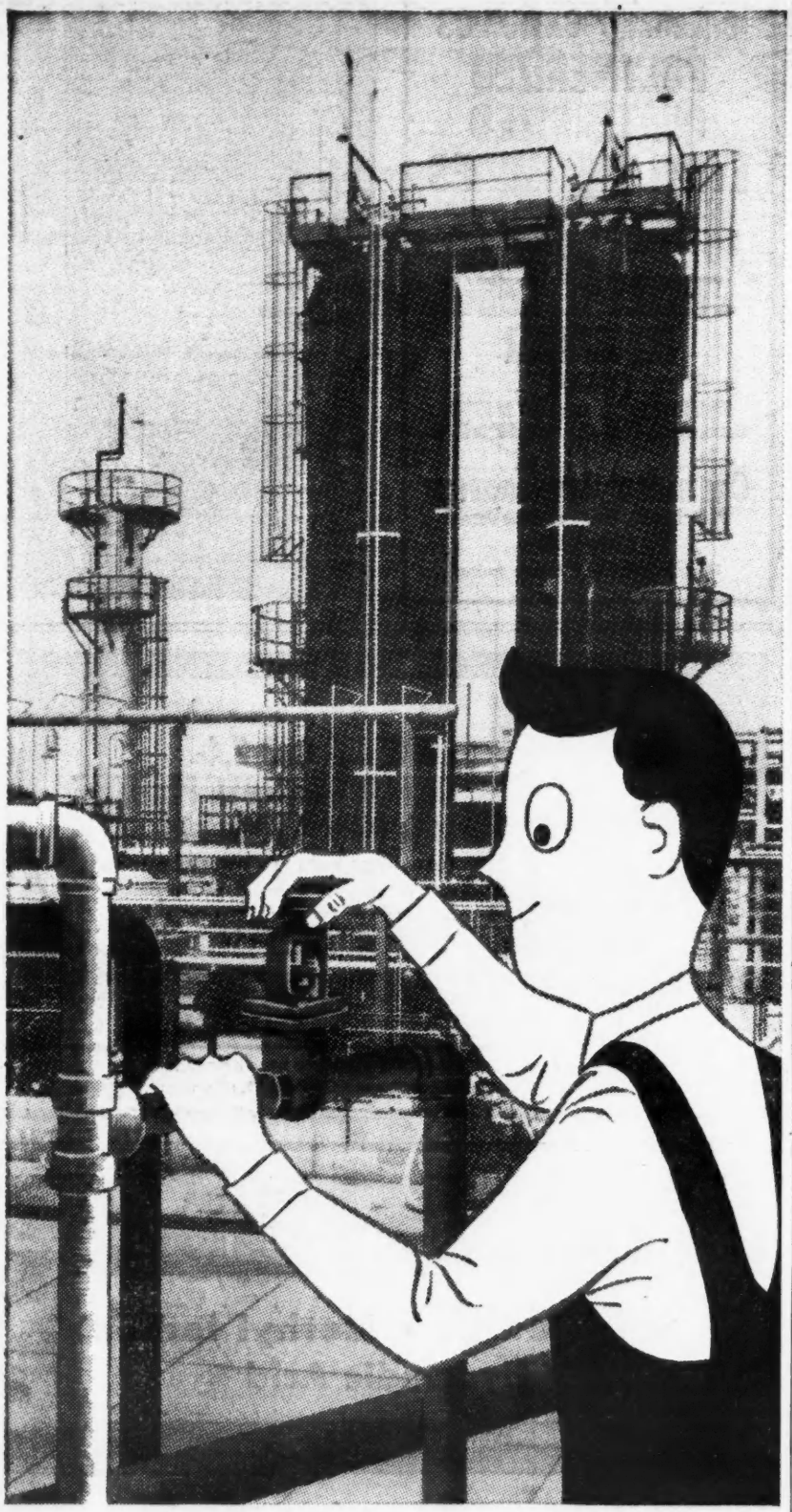

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Coal Chemicals

Potential petroleum-source naphthalene has continued to cast a longer shadow in the coal chemicals market. A breakthrough was achieved last November when a petroleum company announced that a plant for recovery of naphthalene and/or benzene would be constructed at Buffalo, N.Y. Another unit, in the 100 million pound class, has been rumored set for Toledo, Ohio. Despite the assertion by many that production of naphthalene from petroleum feed stocks is unattractive, a number of oil companies have been taking a closer look at the market in the past year. The situation has evolved as a result of the severe shortage of coaltar naphthalene and the drying up of needed import supplies.

Department of Commerce reported world steel production increased to a record 317,861,000 net tons in 1959, a 10 percent advance. The figure was a sharp advance over that reported for the 1958, recession year. However, the increase was only a little above the 316,000,000 net tons turned out in 1957.

The American Iron and Steel Institute reported record imports of foreign steel mill products amounting to 4.4 million tons in the first eleven months of last year. An outstanding change in the pattern of imports was in ports along the Great Lakes, the Institute said. These ports received 695,000 net tons in the eleven-month period as compared with 119,000 in the comparable period of last year.

The 1958 Census of Manufacturers, reveals that shipment of cyclic coaltar crude products during that year had a value of $116.3 million. The figure represents a 47 percent increase over the 1954 value, last year in which the Census Bureau conducted a survey. Average employment in the industry showed a 10 percent increase over the four-year span and value added by manufacture was increased 35 percent from 1954.

The American Iron and Steel Institute estimated that steel production in the week ended February 14 would amount to 94.4 percent of theoretical capacity equivalent to 2,690,000 net tons of steel. Output in the previous week was 2,683,000 tons, in the comparable week one month ago it was 2,727,000 tons and in the corresponding week one year ago steel output amounted to 2,371,000 net tons.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Feb. 13, 1959
118.40	118.40	118.44	118.55

For Current Prices see Page 10

Basic Products

Benzene—The supply position remains tight and is expected to continue so for some weeks to come as large consumers actively seek to build inventories to a comfortable level.

At the close of the strike period, some buyers were reported to have less than a week's inventory on hand. With the end of the strike and resumption of benzene shipments from cokeovens some of the buying pressure subsided. However, benzene is far from being "readily available," sources report.

Export demand has been strong with premium prices being offered. Price in the domestic market advanced 3c. to 34c. per gallon, effective January 1.

Earlier it had been feared that an excess of benzene would show up in the market by mid-year and that the price advance might not hold. The shortage has held on stubbornly and in some quarters, the feeling is that recovery has not been as rapid as had been expected.

Coaltar—The total value of shipments classified in the cyclic coaltar crudes industry for 1958 was $116.3 million, according to the Census of Manufacturers conducted by the Bureau of Census.

Of the total, $86.8 million were products primary to the industry, $26.9 million were products primary to other industries and $2.6 million were resales and receipts for miscellaneous activities, the Bureau said.

The industry shipments of primary products represented 76 percent of the total manufactured product shipments. The 1954 ratio, last year in which a survey was conducted, was 82 percent.

Cresylic Acid—Tar acid sales have continued to lag, according to reports from trade sources. The cutbacks in purchases are felt to be a result of less use of gasoline additives during the winter months, plus inventory adjustments made at the close of the steel strike. The end of the strike made it possible for buyers to "breath easier" as far as future supply goes, although it has been repeatedly reported that consumers were never in any danger of running short, with the possible exception of a two week period at the beginning of November.

Naphthalene — Petroleum source naphthalene has continued to cast a longer shadow in this market. The number of oil companies taking a closer look at the market has increased during the past year as a result of the severe shortage which developed from the steel strike and a drying up of imports.

A breakthrough came in November when a petrochemical maker announced that a plant would be built at Buffalo, N.Y., for the recovery of naphthalene and/or benzene from petroleum feed stocks. Another petrochemical unit, this one in the 100-million pound class, has been rumored to be set for Toledo, Ohio. Other petrochemical sources have been active in weighing the possibilities of entering the market, it is reported.

Meanwhile, cokeoven operators have not been inactive. A major steel company announced expansion of tar distilling facilities at Clairton, Pa., and Fairfield, Ala. In addition, tar distiller is building a 60-million pound naphthalene desulfurization plant at Follansbee, W.Va.

Production of petroleum sulfur-free naphthalene would mean a refined product which would probably sell at 5.7c. to 6c. per pound, it is pointed out.

Phenol—A major synthetic phenol producer has chosen Kalama, Wash., as the site for the firm's 36-million pound plant which will service a booming west coast phenol market. Primary outlet appears to be to users in the plywood industry, sources say.

The phenol market has made a good recovery during the past year and a half despite price reductions totaling almost 2c. per pound. Phenolics, one of the oldest and most inexpensive of resins, have pretty well followed the uptrend in industrial activity after the recession lows of March and April, 1958.

Production in 1959 is estimated to have outstripped output in the previous year by upwards of 100 million pounds. While other "coal chemicals" exports fell substantially last year, exports of phenol were approximately the same.

Phenol producers took in big benzol inventories prior to the steel strike which began last July and were thus able to supply their customers without difficulty throughout the four month cokeoven shutdown.

In recent months, major producers have supplied contract customers without delay, but have been unwilling to take on any great amount of additional business for prompt shipment.

Toluene—Solvent demand has hit a slight uptrend in recent months as the automobile industry has geared operations to turn out a possible 6.5 million cars this year.

Production capacity remains fully adequate to supply trade needs and leaves additional material for the export market.

Price is unchanged at levels established in the trade in late April of 1958, when toluene was reduced 4½c. per gallon and went on a delivered basis. The change in shipping terms was a further reduction, sources point out, so that the actual decline in the market was considerably more than the reported 4½c. per gallon. Despite this fact, sources see little chance of a price advance in this market.

Xylene—As with toluene, capacity to produce is fully adequate to meet trade requirements. Prices are unchanged at levels of long standing in the industry.

Tariff Commission reported production of xylene from all sources in the first eleven months of last year amounted to

Coal Chemicals

204.6 million gallons, 13.3 million more than in the comparable period of 1958.

Intermediates

Cyclohexane—Great expectations over the future of this material in the production of nylon and caprolactam has led to a flurry of expansion announcements in recent months.

A petrochemical producer is expected to come in with additional production this month. Price is 36c. per gallon in bulk.

Melamine—A major chemical producer announced that facilities for producing melamine and urea molding compounds at Toledo, Ohio, would be doubled.

In making the announcement, a company spokesman said that full-scale production of 45-million pounds would probably not be reached until the late 1960's except to meet short seasonal demands.

Melamine dinnerware is made by thirty manufacturers in this country and Canada and constitutes nearly one-third of all dinnerware sold today. On the retail level, this amounts to about $85 million, the company reports.

The expanded Toledo plant has storage facilities for seven million pounds of finished melamine and urea and storage for an additional three million pounds is maintained near consumers' plants.

Coal Chemicals

Estimated output of coal chemicals recovered from cokeoven operations during the week ended February 14, was as follows:

Ammonium liquor	lbs.	948,179
Ammonium sulfate	lbs.	40,289,291
Benzene	gals.	3,709,542
Coaltar	gals.	22,041,004
Crude chemical oil	gals.	698,658
Toluene	gals.	898,274
Xylene	gals.	266,155

Naphthoquinone—Material is slated to come into commercial production early in the second quarter. Truckload price will be 52c. per pound and less truckload, 54c. per pound. Material will be priced on a freight allowed basis.

A purity of 98.5 percent or better will make it possible for consumers to broaden their approach to end products at a more rapid rate, sources feel. Heretofore material has been available sporadically at a purity ranging anywhere from 40 percent to 65-70 percent.

Phthalic Anhydride—The market is unchanged from previous report. Production difficulties plus the naphthalene shortage have hindered producers' efforts to return the market to a balanced supply-demand position.

As a sidelight, observers report the rapid growth of the country's population has tended to crowd some chemical plants which were initially situated in isolated areas. This has led to more restrictions on plants in urban areas.

Styrene Monomer—The world's largest producer came through recently with an announcement that the firm's capacity to produce styrene monomer would be increased from 500 million to 800 million pounds.

Other developments include a petro-

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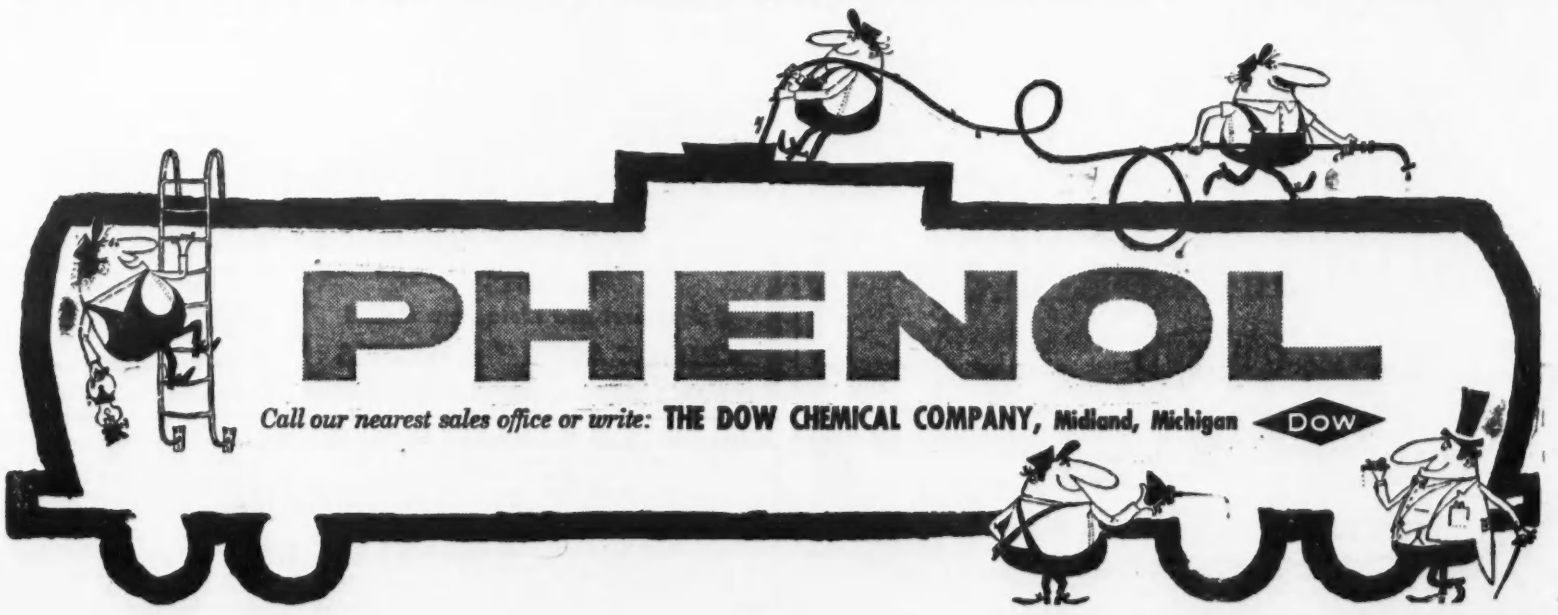

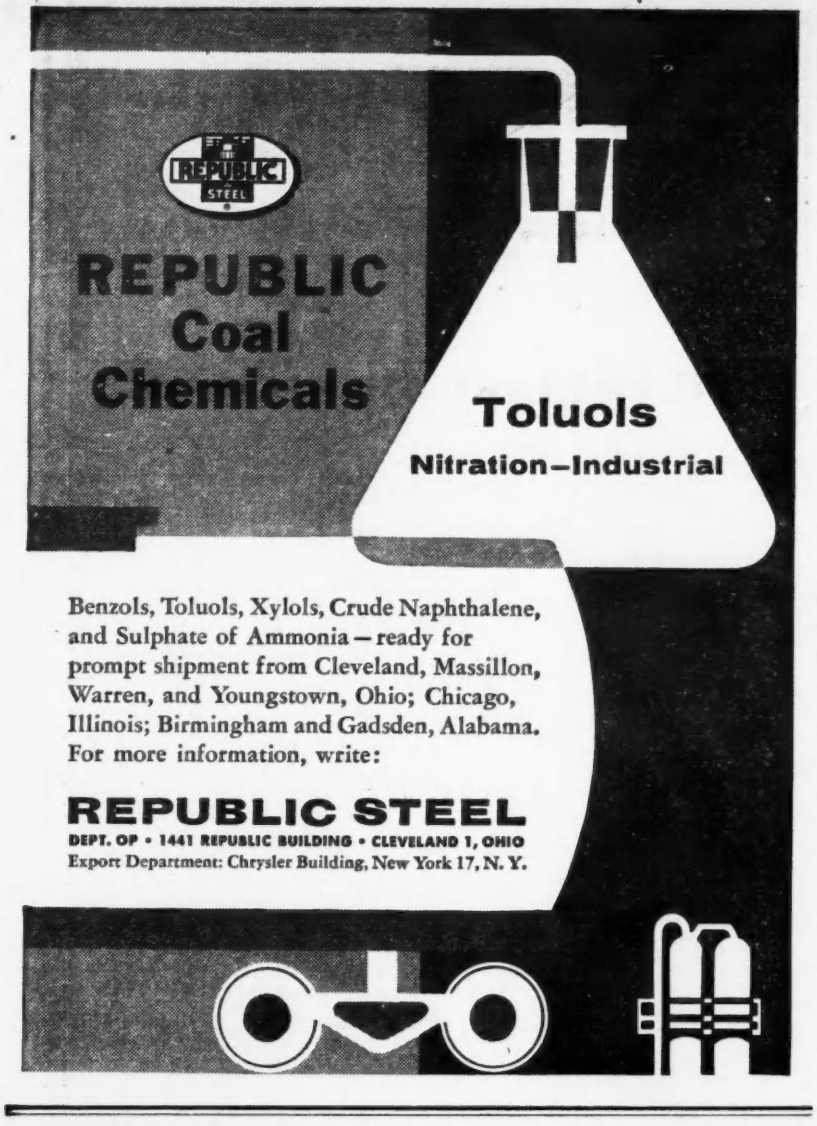
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Coal Chemicals

chemical company's 40 million pound expansion (to 60 million) and the joint venture of a major tar distiller and another petrochemical producer to build a 70 million pound styrene monomer plant.

Last November, this round of expansion and new construction announcements was set off by a basic chemical producer's report that styrene facilities would be boosted 200 million pounds over the next two years.

The glowing production reports of the rubber industry coupled with booming polystyrene demand are behind the capacity increases, sources say. Production of monomer over the past several months has continued to hit 135-139 million pounds.

Total production in the first eleven months of last year was 1.307 billion pounds as against 1.083 billion in the comparable period of 1958. Imports, which ordinarily run to about 10 percent of domestic output were slowed in the final months of last year reflecting the strike condition.

Last price action was the 9/100c. per pound across the board price advance in technical material reported at the first of the year.

Trichlorobenzene—Price is 13¼c. per pound in tanks; 15c. per pound in carload of 55-gal. dms. and 16c. per pound in less carload lots, same packing. Prices are on a frt. alld. basis in the East.

Material continues to find use as a solvent, dye intermediate and has some application as a heat transfer media.

Chemical Industry Seeking

—Continued from page 5

the doctrine modified or at least extended to the chemical industry was turned back by the board seven years ago.

The Fourth Circuit ruling favoring the Industry in the Pittsburgh Plate Glass case, and the craft severance petition being fought before the board by duPont has opened the door to industry to renew its plea.

In its *amicus curiae* brief to the board, MCA notes that integration of operations has long been considered a primary factor in determining the inappropriateness of separate representation on either a craft or departmental basis. This was the reason for precluding separate representation in the steel, lumber, wet milling and aluminum cases, it says.

Operations Are Interdependent

"In the chemical industry," the brief adds, "functionally maintenance and productive work are completely interdependent and are indivisible for all practical purposes. Production and maintenance employees, as well as maintenance employees of different skills, work closely together as a team. Substantially all work, both production and maintenance, is performed in the production area, and often under common supervision.

"Identical working conditions and employee benefits are shared by all alike. As a result only the industrial-type production and maintenance unit truly reflects the fundamental community interest of all the employees and the actual operations of the plants involved.

"Separate representation on either a craft or departmental basis in such plants would be artificial and arbitrary. Its contribution would be disruptive rather than stabilizing, and would promote artificial factionalism rather than true bargaining freedom."

The brief goes on to say that the association's members are deeply concerned with measures to promote effective collective bargaining between themselves and their employees.

They believe that in view of the high degree of integration which characterizes the productive processes in the basic chemical industry, that practical and effective collective bargaining can be accomplished only through negotiations with plant-wide bargaining units.

"The separation of employees into productive units and maintenance craft units constitutes a major deterrent to the bargaining relationship," the brief concludes.

Collier Carbon Elects Two for Posts on Board

Collier Carbon & Chemical Corporation, Los Angeles, has elected A. C. Stewart and Wm. C. Kaesche to its board of directors to fill two newly-created positions. T. C. Henderson, formerly manager of manufacturing, has been named to the new position of vice-president in charge of manufacturing operations.

Mr. Stewart is an officer and director of Union Oil Company, and Mr. Kaesche is Collier's executive vice-president.

Carbon Black Unit Growing

Godfrey L. Cabot, Inc., Boston, has under way a project to add 110 million pounds to its capacity for the production of oil furnace carbon blacks for domestic consumption. An expansion and modification program, soon to be completed, is being carried out at four southwestern manufacturing plants.

Dutch Chemicals Expansion

—Continued from page 7

seven percent during the four previous years.

But that was a recession year, the BDSA people hasten to add. Furthermore, they note, the chemical gain—chalked up against a marked decline in government expenditures—was better than that for all industry.

In terms of total sales, the chemical industry (excluding petroleum) overtook textiles in 1958 to become the country's third most important industrial sector. Metals and food processing finished ahead of chemicals, in that order.

Chemical Sales Up 4 Percent

The year brought an advance in chemical sales of about 4 percent—to 2.6 billion guilders—about the same as for industry as a whole.

Merger and expansion activities of Royal Dutch-Shell provided many of the year's chemical highlights, BDSA declares.

In June the company put on stream the first synthetic glycerine plant built outside the US. It was the latest unit in a petrochemical complex started three years ago near Shell's big Pernis refinery.

Using polypropylene from the Pernis refinery, this facility is moving substantial amounts of glycerine into export. What's more, the company's present plans call for an expansion of 15,000 tons in producing facilities.

Research Tempo

—Continued from page 7

he says, whose metabolism is similar to that of man.

The experiments that proved nicotinic acid to be the human anti-pellagra factor were also carried out with primates, Dr. Folkers notes.

While Dr. Folkers advocates increased emphasis on planned research, he does not believe that this should be carried out by an approach of ant-like empiricism. In contrast he favors more dependence on theoretical insight and less on charts and tables.

An improvement in overall planning of research requires some method to coordinate and integrate the findings of scientists working in different fields. This can be done, Dr. Folkers says, by forming a requisite group—a group of scientists working intimately together on a given subject.

The Perkin medal is awarded annually to a scientist who has made an outstanding contribution. Dr. Folkers is the fifty-fourth to have been so honored by the American SCI.

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Trade Name Chemicals & Specialties

Diversity of products and properties necessitated the division of ion exchange resins into four major resin groups. These include: strongly acidic resins containing sulfonic acid groups; weakly acidic resins which contain carboxylic acid groups; strongly basic resins containing quaternary ammonium groups; and weakly basic resins which contain a mixture of primary, secondary, and tertiary amine groups. Being more specific about the groups, both the weakly acidic resins and the weakly basic resins are limited to exchanging ions or absorbing bases—they cannot split salts. The strongly acidic and strongly basic resins, which undergo the same reactions as do the weaker types of resins, have the further ability of splitting salts. Concerning applications of ion exchange resins, these two can be divided into two major groups: water treatment and chemical processing.

With the synthetic fibers industry booming and continued growth seen for the future flame retarding agents are playing a more important role in this field. There are many diversified flame retardants on the market to cover the needs of natural and synthetic fibers alike, but basically they all must fulfill certain requirements. A smooth surface with good hand should still remain after application of the retardant. A minimum of change in the shade of the fabric, and especially on whites is desirable. Furthermore, durability to a number of washings or dry cleanings is a requirement.

WHAT'S REPORTED ON HERE

Though coverage in the Trade Name Chemicals & Specialties market report encompasses twenty classes of chemicals, only a few of them are mentioned in this issue. Here's the entire list:

Adhesives, antibacterials and fungicides, antifoaming agents, antioxidants, antistatic agents, blowing agents, catalysts and accelerators, chelating agents, chemically processed oils, emulsions and latexes, enzymes, fatty acid derivatives, feed supplements, filtering materials, ion exchange resins, surfactants, synthetic waxes, textile chemicals, thickening and suspending agents, and ultraviolet absorbers.

If you have suggestions for any additional materials that might be included in this section, write OIL, PAINT AND DRUG REPORTER'S Technical Editor, 30 Church street, New York 7.

Chelating Agents

Hart Products Corporation produces **"Kalex"** sequestering agents which chemically is the tetrasodium salt of ethylene diamine tetraacetic acid. **"Kalex,"** a pale straw colored liquid, is said to have 27 percent active content, 35 percent solids content, a molecular weight of 380, pH of 11.5 in a one percent solution, and specific gravity of 1.21.

Hart's **"Kalex Acid,"** which is the free acid form of **"Kalex,"** is a fine white powder having 97 percent active content, moisture content of less than 2 percent, pure acid molecular weight of 292, and a pH of 3.8 in a saturated solution. Hart claims that **"Kalex Acid"** dissolves readily in alkali to form the di, tri. and tetra salts, and any suitable alkali may be used, such as caustic soda, caustic potash, and triethylamine.

"Kalex E," another Hart product, was developed for complexing iron in caustic solutions. It is a clear, straw colored liquid in appearance with a solids content of 57 percent, pH in a one percent solution of 13.0, and specific gravity of 1.18.

Hart says that **"Kalex E"** will rapidly dissolve precipitated iron in caustic solutions; it will prevent the precipitation of iron sulfide in strong caustic solutions; it will sequester and redissolve hard water salts in the same manner as regular **"Kalex."**

"Kalex E" is said to find useful application in any process that involves the use of strong caustic solutions. In the textile industry, Hart claims that **"Kalex E"** finds application in kier boiling, batch and continuous bleaching, mercerizing, removal of rust stains, and in dyeing sulfur colors. Further uses include use in soaker alkali and in soap manufacture.

Geigy Industrial Chemicals, a division of Geigy Chemical Corporation, carries a series of chelating agents trade named **"Sequestrene."** This line of ethylenediamine tetraacetic acid derivatives includes: **"Sequestrene AA, NA2, NA3,** and **NA4,"** which are white, non-hygroscopic crystalline powders, and **"Sequestrene A,"** a clear, colorless liquid.

Compared to the polyphosphates, Geigy claims that the alkali salts of **"Sequestrenes"** are non-colloidal. Furthermore, these salts are not precipitated by cationic surfactants nor proteins, and they have no tanning properties such as exhibited by hexametaphosphate.

Concerning stability, Geigy states that their tasteless, odorless **"Sequestrenes"** salts are stable in acid (10 percent sulfuric acid) or alkaline (15 percent sodium hydroxide) solutions. Stability to oxidizing agents, on the other hand, is limited but **"Sequestrene"** can still be used with oxidizing agents such as peroxides in bleaching compounds.

With regard to surface activity, these salts are not precipitated by cationic surfactants nor proteins. Also they have no tanning properties such as exhibited by hexametaphosphate. Said to have good dispersing power, Geigy goes on to say, however, that **"Sequestrenes"** have no wetting, detergent or penetrating powers and only slight deflocculating action.

Geigy continues by commenting that **"Sequestrenes"** have the ability to form stable complexes with the alkaline earths and heavy metals. However, decrease the pH and these chelates are less efficient complexing agents. Also, an increase in temperature is said to result in decreased stability, but the effect Geigy says, is of negligible significance.

Flame Retarding Agents

American Cyanamid Company puts out a flame retarding agent called **"Pyroset DO."** This white, free-flowing powder is said to have a 100 percent solids content, to have storage stability at room temperature for over a year, pad bath stability for more than 8 hours, and to be compatible with thermosetting resins and Cyanamid's **"Aerotex Water Repellent S," "Aerotex Softener H,"** and **"Deceresol Wetting Agent NI Conc."**

Concerning stability of **"Pyroset DO,"** Cyanamid says that it requires the use of phosphoric acid to dissolve it. Usual procedure suggested by the company is to dissolve **"Pyroset DO"** in a fairly concentrated solution of the acid. Also, since the fire retardant evolves heat as it dissolves, the dissolving bath should be maintained at a temperature no higher than 120°F.

Cyanamid suggests **"Pyroset DO"** for use imparting fire retardancy to fabrics made of cotton, rayon, wool, mohair or combinations of these fibers. It will not protect, however, acetate, nylon, acrylic or other thermoplastic fibers.

Another Cyanamid fire retardant is **"Pyroset Fire Retardant N-2."** This is a stable urea-formaldehyde syrup which is a clear syrup in appearance, has an 80 percent resin solids content, a pH of 7.5 to 8.5, and weighs 10.5 to 10.9 pounds per gallon.

Designed to provide a stiff fire retardant finish on nylon fibers, Cyanamid says that **"Pyroset Fire Retardant N-2"** is infinitely dilutable with water at room temperature. Concerning bath preparation, Cyanamid claims that the required amount of resin is dissolved at room temperature. The ammonium chloride is dissolved in a small amount of water and added to the dissolved resin before diluting the bath to its final volume.

"Fire Retardant RC" is a general-purpose fire retardant manufactured by Burkart-Schier Chemical Company. Fabrics correctly processed with this fire retarder will not support combustion and in most cases there is no after-glow. Furthermore, the company claims that application of **"Fire Retardant RC,"** especially when the amount is at the minimum, does not effect the hand of most textiles.

Burkart-Schier continues by saying that where the goods are entered dry into the **"Fire Retardant RC"** bath the use of a penetrant to insure rapid saturation may be desirable, but is generally not necessary. Furthermore, excessive tem-

—Continued on page 63

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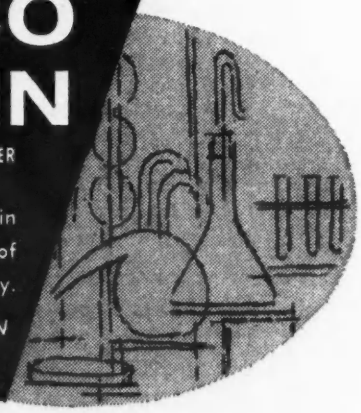

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Drugs, Fine Chemicals

Demand for bulk aspirin is way up, in contrast to the routine interest that usually characterizes this market in February. Increased orders, it's said, are putting pressures on suppliers, but, as yet anyway, none are encountering serious difficulties in meeting commitments. In mid-January, aspirin tableters, reporting a major rise in sales and around-the-clock operations, gave first indication that the current boom was coming. Effects of increased consumer buying did not filter down to basic producers, however, until the beginning of the month at which time additional bulk production was scheduled. Last week, reportedly, some plants in the industry were still operating seven days a week.

A new anticoagulant, tradenamed "Miradon," is reported. Known chemically as anisindione or 2-p-anisyl indanedione, the drug can be given orally in a single daily dose, in contrast to the frist developed of these agents, Heparin, which must be administered intravenously.

Extensive clinical trials, it's said, have shown that "Miradon" allows ready stabilization and control of the clotting power of the patient's blood, evokes minimal drug resistance, and maintains an effect upon the patient's blood for no more than twenty-four hours after the cessation of treatment.

This last property is considered especially significant since some currently-used anticoagulants accumulate unpredictably in the body of the patient on long-term anticlotting therapy. And as a result, the patient may be overtreated, with hemorrhage resulting, or undertreated, with formation of new clots or emboli resulting.

Importance of anticoagulant drugs, such as "Miradon," is readily seen. More than a million Americans are stricken each year with new diseases caused by clots and emboli. In 1955, President Eisenhower was one of these millions, and like countless others, he has benefited from anticoagulant treatment.

Acetophenetidin—One of the ingredients in Anacin and other popular pain-killing remedies, acetophenetidin is usually in good demand, fall and winter. The pattern has held this season, sources say, adding that current demands, while far from spectacular, are nonetheless up to par.

Supplies are fully adequate, prices unchanged at long-established levels. Revisions this late in the season are not likely.

Aspirin—Trade sources report that demands for bulk aspirin are way up, something of a surprise development since February is normally a routine month. Flu outbreaks across the nation are responsible for the boom, it's believed.

Aspirin tableters reported a giant rise in sales and around-the-clock operations in mid-January, but at that time bulk suppliers noted no comparable increase in business. They said, however, that it would be a few weeks before effects of increased buying at the consumer level filtered down to basic manufacturrs.

At the beginning of the month, they got the message in the form of larger orders from tableters and increased production immediately. Some plants are still operating seven days a week, according to recent reports.

Increased orders are putting pressures on suppliers, it's said, but as yet anyway, none are encountering serious difficulties in meeting delivery schedules.

Benzocaine — Benzocaine is currently selling at $3.25 per pound, packed in drums in 100-pound quantities. According to a supplier's schedule, freight is allowed to all points in the continental US.

A white, crystalline, odorless and tasteless powder, benzocaine (ethyl-para-aminobenzoate) is used medicinally as a surface anesthetic. For this market it competes with procaine hydrochloride.

Caffeine—Imports rose from 72,797 pounds in November to 167,890 pounds in December. Supply sources were, as usual: West Germany (151,170 pounds), The Netherlands (10,000 pounds), and The United Kingdom (6,720 pounds).

Despite continual importations, domestic caffeine makers have been able to hold on to a uniform share of market month-to-month. Competitive pricing is one of the reasons why.

Currently, overall demands are up to normal levels, supplies adequate.

Ephedrine—USP ephedrine sulfate is priced at 73c. an ounce for 100-ounce lots, packed in drums on an f.o.b. works basis. Schedule is the same for both crystalline and powdered material.

Ephedrine hydrochloride is listed at 72c. an ounce for 100 ounces.

Iodine—December imports of crude iodine, totaling 149,049 pounds (against 100,883 in November), came from Chile (139,639), traditional supplier of US iodine needs, and Japan (9,410). The latter country, as the statistics show, is not a major market factor—yet anyway.

Based on inquiries to this column, there's considerable interest in a new use for iodine, recently reported here. This is the use of potassium iodide as a disinfectant for swimming pool water.

Menthol—Brazilian menthol prices are higher at $7.25 to $7.50 a pound on spot and $7 for shipment. Behind advancing prices here are several factors; among them, increasing requirements in the US as well as abroad for menthol (in cigarettes); lack of offerings from Brazil currently, and lack of substantial offerings from Japan most of the time.

Jap menthol, where available, is selling at $11.75 to $12 per pound, reportedly. One trade source feels that Japan will not be able to fill its own requirements this year and will be forced to shop in countries that now ship to the US. This also could curtail supplies in the US during coming months.

Saccharin—After dropping to 17,580 pounds in November from 15,817 the previous month, imports rose to 27,578 pounds in December. All of this material came from the usual supply source, Japan.

Continual importations keep the domestic saccharin market highly competitive,

—Continued on page 48

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Feb. 13, 1959
60.22	60.22	60.22	61.15

For Current Prices see Page 10

Drug and Fine Chemical Exports: December

Exports of selected drugs and fine chemicals for the months of November and December, 1959, as reported by the Bureau of Census were as follows:

		December	*November*
Analgesics and antipyretics	lbs.	14,648	42,066
Antibiotics, n.e.c*	grs.	13,487,316	11,595,895
Ascorbic Acid	lbs.	67,947	55,414
Aspirin	lbs.	155,092	99,858
B-complex (excluding B_1 and B_{12})	lbs.	41,226	28,169
Bacitracin	100-million units	8,000	7,770
Dihydrostreptomycin	gms.	5,336,481	4,381,000
Pectin and preparations	lbs.	31,278	22,355
Penicillin, bulk	million units	5,254,668	4,166,156
Streptomycin, all forms	gms	2,430,003	7,379,080
Sulfa Drugs	lbs.	76,409	59,001
Thiamin	lbs.	4,953	3,348
Vitamin, A, bulk and medicinal	lbs.	6,852	10,846
Vitamins, n.e.c.*	lbs.	50,495	104,233

* Not elsewhere classified by the Census bureau.

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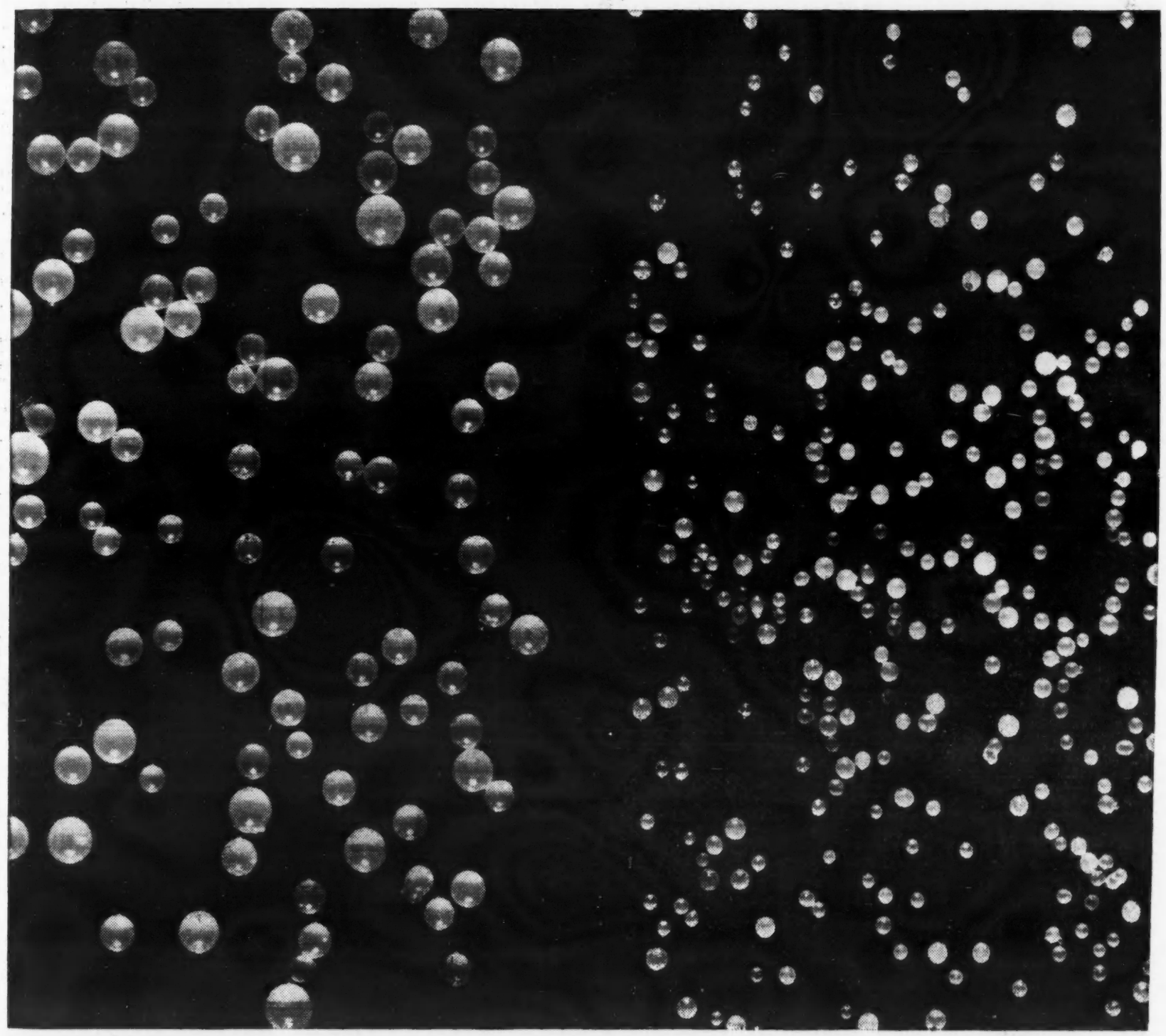

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Drugs, Fine Chemicals

—Continued from page 46

and, in fact, pressured a US maker to cut prices late last year.

Still another factor that tends to depress the market is the increasing acceptance of calcium and sodium cyclamates which are also used as non-caloric sweeteners.

Sodium Benzoate—Demand from food industry users for USP sodium benzoate continues strong. Other applications for this and other gardes of the chemical, including antiseptics, medicines, tobacco, and pharmaceutical preparations, are also taking routine quantities, sources say.

Prices are unchanged at long-standing levels. Truckloads are priced at 38c. per pound, 2,000-pound quantities at 43c. a pound, and 1,000-pounds at 45c. a pound, on a freight allowed basis. Lesser quantities, however, are sold f.o.b. shipping point.

Theobromine — Because of tight supplies, theobromine prices have gone progressively higher. Last week, schedules were set up like this: theobromine NF, $5.50 a pound for 100-pounds; theobromine and sodium acetate, $6.45 a pound for 500-pounds and $6.50 a pound for 125-pounds; theobromine sodiosalicylate, $5.45 a pound for 500-pounds and $5.50 a pound for 100-pounds.

December imports of theobromine were 1,400 pounds, down from 11,186 pounds the month previous. The Netherlands shipped 1,000 pounds here, France the remainder.

Thymol—Thymol is currently quoted at $3.06 per pound on 25-pound orders. Packaging is fiber drums.

Thymol iodide in 25-pound quantities is listed at $7.42 a pound. On a 100-pound order, the price is 2c. less.

Botanicals

Midwinter, and the usual shortages are developing. Doubly unfortunate, demand for most of the short items is good. What dealers here would like to buy: aconite root, belladonna root, alkenet root, colchicum seed, passion flower herb and witch hazel leaves.

Aconite Root—A dealer here reports that aconite root is in very short supply with no prospects of early arrival of new crop material. With little or no material to sell, he has not bothered to boost prices which remain at a range of 50c. to 55c. a pound.

Gum Arabic—The shipping season for gum arabic from the Sudan is starting, occasioning a slight drop in prices here. Last week, according to a dealer's report, amber sorts were listed at 24c. per pound in ton lots, slightly higher in smaller quantities.

Also 4c. lower, the USP powder was quoted at 29c. to 30c. a pound.

Senna Leaves—Current prices for Alexandrian senna range from 20c. to 22c. a pound for the whole and half leaves to 16c. a pound for the siftings.

Tinnevelly leaves No. 1 are listed at 22c. a pound, No. 2 at 18c., and No. 3 at 14c. Moderate to good inquiry, adequate stocks are reported.

Tonka Beans—Prices are stable at $1.50 a pound for the Angostura beans, $1.30 a pound for the Brazilian variety. Stocks are fully adequate, demand routine.

Wahoo Root Bark—A domestic botanical, wahoo root bark is currently listed by dealers here at $2 to $2.25 a pound, the spread reflecting a quantity differential.

Witch Hazel Leaves—According to trade reports, demand for this large volume botanical is strong, but little if any material is available. Consequently, prices are up and very firm at 28c. to 30c. a pound.

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Alcohol Regulations Changes Listed in 'Federal Register'

New regulations dealing with the distribution and use of completely denatured alcohol, specially denatured alcohol, specially denatured rum, tax-free alcohol, and formulas for denatured alcohol were published in the *Federal Register* February 5 by the Internal Revenue Service.

The new regulations are designed to make the control machinery of the government conform to the modifications written into the alcohol tax control law by congress last year. They tend to liberalize the requirements for the most part and will go into effect July 1, 1960, unless objections are raised by industry.

IRS has given interested persons thirty days to submit written comments on the regulations or to file requests for public hearings.

Nuodex Appoints Robinson

Nuodex Products Company, New York, a division of Heyden Newport Chemical Corporation, has appointed Gerald P. Robinson manager of industrial fungicides. Mr. Robinson was previously research chemist and then sales representative in the industrial division of Lever Brothers Company.

Pesticides Close Year

—*Continued from page 4*

stocks of these materials ranged 27 to 53 percent lower, the survey shows.

DDT closed in somewhat larger supply, reflecting heavy exports scheduled in advance of the world malaria-eradication program.

In heavier supply were grain and soil fumigants, lead arsenate, and most of the chlorinated hydrocarbon group, such as aldrin. Stocks of the newly-developed fungicides, weed killers and organic phosphorus insecticides were particularly high, the survey reveals.

Carryover of the latter was great enough to offset declines in other materials, so that total stocks of pesticides closed the year about unchanged.

As during the previous year, 38 percent of stocks was in the form of mixtures.

Manufacturers stocks of unmixed pesticidal chemicals as of September 30, 1959, expressed as a percentage of 1958 inventories, follow below:

Aldrin, chlordane, dieldrin, endrin, heptachlor, toxaphene	144
Benzene hexachloride (gamma basis)	54
10-26 percent gamma grades	48
36 percent and above, including lindane	62
Calcium arsenate	60
Copper fungicides	83
2,4-D (acid basis; includes producers' formulations)	47
DDT	114
Fumigants (grain and soil; includes mixtures)	121
Lead arsenate	149
Miticides (miscellaneous)	127
Organic phosphorus insecticides	65
includes: Methyl parathion	43
Parathion	121
Others	362
2,4,5-T (acid basis; includes producers' formulations)	79
Fungicides (miscellaneous)	115
Insecticides (miscellaneous)	64
Weed killers (miscellaneous organic)	296

K Rations

—*Continued from page 5*

nanas, blueberries, milk, meat, fish and cereals.

What effect will this innovation have on the $55 billion food processing industry?

Dr. Eric J. Hewitt, vice-president at Evans, believes the enzyme reactivation process will trigger a race among the processors toward fresher flavors that will be a boon to the industry.

Also, improved dehydrated foods would mean the savings of millions of dollars in freight and handling, he says.

Dr. Murray Berdick, coordinator of research, predicts that tomorrow's markets might dispense foods with full automation. Food vending machines would be located outdoors in such places as parks, beaches, and remote neighborhoods. Eventually, all kinds of dehydrated foods might be purchased out of the pages of mail order catalogues.

He further speculates that this process may have application to the space age. He prophesies that the pioneer astronauts will have a flavor-enzyme kit to prepare a home-cooked meal hundreds of miles out in space.

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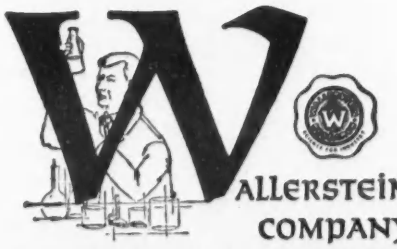

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Essential Oils, Aromatics

It was impossible to find a price last week for Bourbon geranium. Spot offerings have been withdrawn due to the chaotic market conditions at source, dealers here in the New York area reported. The latest report is that there will be no distillation of oil during February—a move that will undoubtedly further tighten an almost unbelievably tight situation. Why the still will not operate this month was not explained.

Great quantities of eucalyptus oil are being traded at the present time, dealers reported. This particular time is what is known as the tail end of the season for manufacturing cold remedies and, of course, eucalyptus oil is a favorite ingredient for the various cold preparations.

Pepper continues downward, the explanation being that demand is slackening. Vanilla beans declined the following amounts: Bourbon, 75 cents per pound; Mexican wholes, 75 cents per pound, and Mexican cuts, 75 cents per pound.

The General Services Administration recently announced plans to dispose of 51,646 pounds of government-owned poppy seeds which have been released from the national stockpile of strategic and critical materials.

Now obsolete for defense purposes, their sale can be undertaken after the expiration of a statutory six-month waiting period.

The seeds were acquired originally by the government for possible emergency cultivation of opium poppies for medical purposes.

The surplus poppy seeds are white and not of the type generally used in the bakery trade. Nor are they considered to be of edible quality. However, they are suitable, in their present state, for the production of oilseed.

Because of its non-yellowing characteristics, poppy seed oil is valued by artists as a drying agent.

According to the General Services Administration, the seeds will be offered for sale on a competitive basis, with details of bidding to be announced in approximately six months.

Prospective purchasers will be made familiar with the provisions of the Opium Poppy Control Act of 1942 and will be required to provide assurance that any seeds they acquire will be applied to one of the recognized legitimate uses and not, directly or indirectly, to the production of the opium poppy.

Price Trends

Advanced
None

Reduced
Vanilla beans, Bourbon, 75c. per lb.
Mexican wholes, 75c. per lb.
Mexican cuts, 75c. per lb.

Comparative Price Indexes
(100=1949 average)

week Last	week Prev.	month Last	1959 Feb. 13,
147.18	147.45	145.99	147.45

For Current Prices see Page 10

Essential Oils

Citronella—Both the Ceylon and the Java-type remain strong. Reports from Formosa indicate that the prices there (for Java-type material) are stronger than prices on spot. In the OPD listing, Ceylon material remains at 90c. per pound and Java-type material remains at 85c. per pound.

Eucalyptus — The price continues right around the half-dollar level with dealers reporting a good volume of business. Partly responsible is the fact that now is probably the height of the cold-catching season and eucalyptus oil is a principal ingredient in many cold remedies such as cough drops.

While the eucalyptus genus is typically Australian, many varieties of the trees grow in such places as Algeria, California, India, New Zealand, Spain, South America and the Belgian Congo.

In Australia, the drawfed types of trees grow in the areas where there is little rainfall; the tall straight types grow in the coastal and mountainous regions; others grow at the sea and still others thrive at the snowline.

The principal South American country that produces eucalptus oil is Argentina, where the total yearly production is estimated be to between 17,000 and 22,000 pounds.

None is exported, however, since Argentina's own domestic needs absorb all of it. The trees are grown mainly for their timber.

When strands of the trees are thinned, the leaves are then distilled for their oil. Distillation is usually during the winter months which in Argentina, are from April to November.

Dillweed—Since the decline from $3.25 per pound to $3 per pound in late November, no pricing change has taken place in this market.

According to agriculture reports, weather conditions are responsible for yield of oil. Extremely hot sunshine tends to burn the plants and thereby reduce the quality and quantity of oil that can be produced.

Harvest usually takes place in the early fall. The crop should be cut when the most advanced seed is turning brown. Material is cut, allowed to dry for a short time in the fields, then hauled to the distillery. Drying for an extended period of time results in considerable loss of oil by evaporation, especially of the more volatile terpenes.

For this reason, the oil distilled from dried herb would be relatively high in carvone, a characteristic undesirable in herb oils.

The principal growing areas in the United States are in Ohio, Idaho and Oregon. It is interesting to know that, although dillweed was first planted in North America, many, many years ago, it was not grown commercially until 1930. Now, the United States relies almost completely on its domestic production and is in no way dependent on its former European suppliers.

Geranium—The Bourbon market remains in a state of confusion with no dealers on spot quoting prices or offering material. News from source is that the scarcity will continue for a while at least, because there will be no distillation of oil during the whole of February.

No reason was put forth for discontinuing distillation. Possibly the stills were damaged along with the crop by last month's storms. (This is but a conjecture.)

It is fairly certain, however, that a good deal of the crop was destroyed. The source report indicates that instead of some 40 to 50 tons of oil, the production between January and March will be only 25 tons. Fifteen of these tons were shipped before the storms, so that means there are only some 10 tons of oil to be shipped until the end of March.

Twenty tons are expected to be distilled between April and June; 20 tons during July and August, and 30 tons between September and December.

Algerian material is not expected to be distilled until March, but, as this publication pointed out last week, this will have little effect on the over-all market. Algeria usually produces some 8 to 10 tons per year.

Grapefruit—The market remains firm with the prices still at their previous range, from $2.10 per pound to $2.70 per pound. Material is reported to be quite scarce.

Lime—Reports continue to come in that West Indian expressed material is firming. The low of the range, however, continues at its previous quotation, $7.75 per pound. Mexican distilled material continues at its previous level, $6.25 per pound.

It is interesting to note that Mexican material never advanced in price in spite of the fact that a good portion of the trees in the state of Colima were severely damaged by a storm in October.

Shortly after the storm, the New York representative of the Mexican lime growers co-operative reported that little or no lime oil would be available from Colima for three or four years.

Statistically, Colima produces approximately 40 percent of the annual Mexican output of lime oil. The whole of Mexico produces some 90 percent of total world production.

A noteworthy fact about the West Indian lime tree is that it bears fruit all year around and small quantities may be gathered during all 12 months. There is a principal harvesting season, however.

(Left in picture: Arthur H. Downey, MM&R Director of Research and Technology.)

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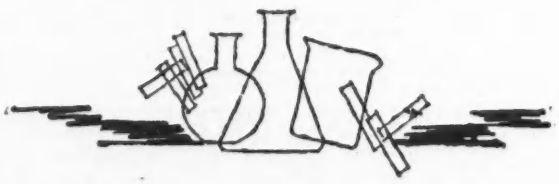

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Essential Oils

It extends from June or July to November or December—the time during which the trees are in full bearing.

Often the harvesters go through the orchards and pick both the green and the yellow fruit at the same time. Green fruit is wrapped in paper and packed in barrels to be exported. It must be green when it is shipped because ripe fruit would be over-ripe by the time it arrived at its destination.

Fruit that is ripe when it is picked is converted into juice, citric acid and oil of lime. Sometimes, even the green fruit is converted into oil if the demand for the whole fruit is poor. Ideally, the green fruit makes better oil because it gives a better yield. During a normal season, however, the oil is pressed from a mixture of the green and the yellow fruit—the predominating type being the yellow.

Petitgrain—The market continues firm with reports from source that shipping prices are as high as spot prices. The OPD listing remains at $2.50 per pound, however.

Spearmint—Little activity has been noted in the market for some weeks due to the extremely high prices. Material ranges in price anywhere from $9 per pound to $11.75 per pound.

It is still believed that material is in the producing areas and that producers are holding out for all they can get.

On spot, one dealer indicated that demand for such high-priced oil was so limited that his company was thinking of lowering the price.

Spearmint users ought to be reminded that the Department of Agriculture released figures last year that the 1959 crop would be some 663,000 pounds—some 34 percent more than the previous year's crop and some 11 percent more than the average years' crop.

Toward the end of 1959, there was speculation among the dealers and brokers that the producers had raised their prices, temporarily merely to keep 1959 sales down for income tax purposes.

Persons who put forth this idea believed that as soon as 1960 began, the market would loosen since producers would again be eager to make money. This has certainly not been the case.

Aromatic Chemicals

Isobornyl Acetate—The market is reported to be firming. The OPD listing remains at 46c. per pound, but some dealers have advanced their prices to 51c. per pound.

Seeds and Spices

Pepper—Malabar black material declined from 65c. per pound to 63c. per pound and Muntok white declined from $1.13 per pound to $1.10 per pound. Demand for black was reported to be limited.

Unofficially, it is believed that the new crop Malabar is about 26,000 tons. Indian home consumption is probably approximately 8,000 tons, leaving a balance of 18,000 tons. Six thousand of these were shipped during December and January to the world. Russia and Iron Curtain countries usually take approximately 6,000 tons every year from India which would leave, for the United States and other consuming markets approximately 6,000 tons.

Demand for white also is reported to be limited, but red peppers or Japanese chillies are in strong demand with prices working higher. Turkish chillies, on the other hand, are good buys at the present time.

Paprika—The market for Spanish material is reported to be quite strong.

Turmeric—The prices for the new crop of Alleppey material were sharply lower than they were the previous week, it was said.

Vanilla Beans—Further weakening in the market for vanilla beans has brought the prices down.

According to dealers here in the New York area, this is the situation: Bourbon beans have been reduced from $15 per pound to $14.25 per pound; Mexican wholes have been reduced from $15.50 per pound to $14.75 per pound, and Mexican cut have been reduced from $15 per pound to $14.25 per pound.

New regulations concerning labeling of frozen desserts have still not been made by the Food and Drug Administration and dealers here say they have no idea when they will be decided upon.

Chemical Laws

—*Continued from page 4*

strates the potential dangers that exist in this situation, even for firms and individuals who may be completely innocent of any wrong-doing or negligence.

In determining public policy on this matter, he says, "full account must be taken of the effects upon the public health and welfare, soil and water contamination, and wildlife conservation, as well as the economic aspects. In the light of the uncertainty and confusion that now prevails, it is important that we evaluate the tests, conclusions, and procedures that were involved in the cranberry problem.

"We should identify the scope of the over-all problem created by these uses of chemicals. And we should carefully analyze and weigh any danger, or potential danger, to human health and wild life."

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Coatings Materials

Zinc dust producers took a roundhouse swing last week at published reports to the effect that zinc dust consumption would double in '60. Output last year was 20,000 tons. The report cited the rapid increase in demand from the automotive trades to account for this phenomenal burst in demand. Its popularity with the auto makers, the report goes on, is in its use as a water thinned primer paint, which eliminates flash fire hazards. Producers were quick to point out that beside the limited supply of raw material, the auto makers are as notoriously capricious in their industrial techniques as in their styling innovations. What might be a windfall in 1960 could easily be a bust in '61. Even with that, the 40,000 tons of zinc dust is simply beyond the capacity of the trade, producers state, and what material the auto people might need is only a small part of the total demand.

In the other prime pigments, the cadmium colors are scheduled to undergo a price change, effective February 15. The new price of all grades of CP cadmium reds and yellows and the red, orange, yellow and the maron cadmium-mercury and cadmium-selenide lithopone colors are 4 cents to 10 cents per pound higher. Prices for titanium dioxide hold at the same levels as in previous weeks as demand for the whitener from the paint and paper industries continued to grow at a steady rate. Sales volume for earth colors are reported for January to be excellent and preliminary surveys for February sustain this optimistic trend.

While the supply picture for phthalic anhydride continues to improve, inventories are off from seasonal levels, and predictions as to when production will return to normal, range from April to the middle of the year. Meanwhile, producers are meeting immediate de-

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Feb. 13, 1959
103.03	103.03	103.03	103.10

For Current Prices see Page 10

Prime Pigments

Cadmium Colors—Effective Monday, February 15, the new price of all grades of CP cadmium reds and yellows and the red, orange, yellow, and maroon cadmium-mercury and cadmium-selenide lithopone colors are 4c. to 10c. per pound higher.

As announced previously by producers, the new quotations of CP cadmium colors are for red, dark shade $5.55; light shade $4.65; medium srade $4.90; and orange-red shade $4.30. Cadmium CP yellow is $2.85 for all shades.

Prices of cadmium-mercury lithopone colors are as follows: orange is $1.65; red, dark shade $1.95; red, light shade, $1.72; red, medium shade, $1.87; red medium light shade $1.80; red maroon shade $2.03 per pound.

Carbon Black—The following figures in thousands of pounds, indicate production, shipment, stocks and exports of carbon black for December, 1959, with figures for November, 1959, and October, 1958, reported for comparison.

	Furnace	Contact	Total
Production			
December, 1959	154.254	27.114	181.368
November 1959	136.722	25.308	162.030
December, 1958	125.923	27.467	153.390
Stocks			
December, 1959	126.620	67 242	193.862
November, 1959	123.027	70.260	190.287
December, 1958	190.938	93.366	284.304
Shipments			
December, 1959	147.661	30.132	177.793
November, 1959	145.084	33.493	178.577
December, 1958	138.256	31.930	170.136
Exports			
December, 1959	*	*	*
November, 1959	24.876	13.806	38.682
December, 1958	29.543	15.604	45.147

* Figures not available.

Chrome Colors—According to a report by the Bureau of Census, production of chrome oxide green in November came to 462 short tons, in October 605, and in November, 1958, 636. Stocks at producing plants in November totaled 499 short tons and 483 in October.

Output of chrome yellow and orange came to 2,411 short tons in November, 3,030 in October, and 1,833 in November of 1958. Stocks at producing plants amounted to 2,433 and 2,266 short tons in November and October of 1959 in that order.

Production of molybdated chrome orange was tallied at 566 and 585 short tons in November and October of 1959 and November of 1959. In November and October of 1959, stocks at producing plants came to 693 and 631 short tons, respectively for the two months.

Earth Colors—Producers report sales volumes for January are good with February showing every sign of continuing this welcome trend. Synthetics have grabbed some of the market that would normally go to markets traditionally reserved for the natural earth colors but since the market is healthy enough to easily accommodate them, no radical change in producing patterns is anticipated. Prices hold at the same levels as in previous weeks, unchanged.

Titanium Dioxide—Expansion in key industries has brightened the end use patterns of this largest volume paint and paper white pigment. Sources report a steadily growing demand and point to the excellent properties of the whitener as the reason for its popularity. With demand brisk, prices are steady and unchanged.

Victoria Blue Toner—The price of $4.95 per pound for Victoria blue toner, molybdated, PMA, became market wide today (February 15). A month ago several producers announced prices increases of 45c. per pound and with one exception, all producers followed the new price. Last week, the new price was adopted by all producers and became effective Monday, February 15.

Zinc Dust—Reports current in the trade to the effect that the consumption of zinc dust would double in 1960 from 20,000 tons in 1958, were sharply denounced by producers this week as unreasonable and ridiculous. The report had maintained that the demand from the automotive and household appliance trade was increasing at such a rapid rate that a record production year was anticipated for 1960. Contacted producers point to the shortage of raw material and limited capacity as reasons to back up their denial.

Of course, pipedreams aside, nothing would suit them better than to ride the crest of such a beautiful growth curve. But reality dictates more moderate successes. Producers are satisfied with the market situation as it stands. There is a pleasant tightness existing with no sign of any softening. A price increase at this point would be welcome to enable producers to recover accumulated increased costs and permit more realistic profits. This increase is not entirely ruled out for the future particularly in view of the present tightness.

Lacquer Materials

Plasticizers—Supply picture for phthalic anhydride improves, but as to when capacity will be back to normal proportions ranges from April to the middle of the year. Producers of phthalic have been able to meet most of the immediate demands, but have not been able to build up any sizable inventories.

Most effected by the phthalic anhydride shortage are the phthalate esters such as DOP and DIOP. Price patterns, however, have not felt the consequences of the shortage and are expected to remain unchanged for the balance of the quarter. Enjoying a heavier than normal sales volume are the non-phthalate plasticizers.

Synthetic Resins

Alkyd Resins—Supply position in this market continues to improve. Oils, fatty acids and polyol for alkyd manufacture are in ample supply; it has been lack of supplies of phthalic anhydride which has hampered this market. In general, immediate needs are being taken care of, but producers have not been able to build inventories. Price patterns remained firmly established.

Epoxy Resins—A new laminating epoxy resin, which chemically is a dicyclopentadiene dioxide type has recently been de-

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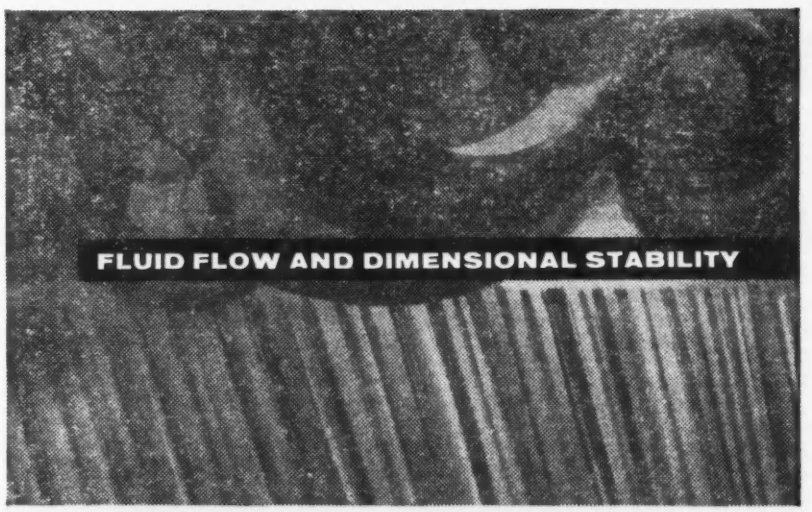

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Coatings Materials

veloped. Teamed with glass fibers, plastic laminate producers claim that this epoxy laminate yields strong, temperature-resistant laminates. Furthermore, it is said to be able to withstand temperatures up to 600°F.

This new epoxy laminate will find use in printed circuit boards, automotive parts, piping, aircraft, and missiles. Also, slated for the near future is use of the laminate in truck cabs, special auto bodies, and home appliances. Producer describes their product as being dent-resistant, corrosion-resistant, and lighter than aluminum with more strength than steel.

End use pattern of these resins had increased greatly over the past several years. There are many modifications of epoxy resins available for use in industrial and marine coatings and also adhesives and various laminating materials.

Fillers & Inerts

Asbestos—Shipments for the asbestos industry at the end of November, 1959, ran 78,800 tons or 10 percent ahead of the same period in 1958. Predictions for the 1959 market have been sharply revised downward. Originally, sales were anticipated to be 20 to 25 percent over the mark set in 1958. Now it is generally felt that the industry will have to settle for a 10 to 15 percent increase in sales for 1959.

Miscellaneous

Casein—The market situation is unusually quiet this week. Argentine, which normally is subject to continual fluxuations, remained unchanged this week. Prices held in the 19c. to 19¼c. per pound range. Sources believe that buyers are holding off in anticipation of lower quotations. Whether a price cut is in the cards is considered problematical.

Natural Resins

Gums—General market conditions are unchanged from previous weeks. The price of congo copal holds at 25c. to 27c. a pound for No. 1, while No. 2 is in the range of 22c. to 24c. a pound. Singapore and Philippine pale chips prices are steady and unchanged.

Shellac—Material continues to move at a good rate. Listings for all grades are holding and appear unlikely to be affected for the near future.

Naval Stores

Pine Gum—For the week ended January 30, the average price per standard barrel of commercial crude pine gum was reported at $30.30 as compared with the $29.90 the previous week and $23.30 a year ago. The volume of gum deliveries to plants totaled 1,621 as against 3,151 the previous week and 2,862 a year ago. Content per barrel included an average 7.26 gallons of turpentine and 296.6 pounds of rosin. Gum percentages ranged as follows: N, 30; M, 58; and K and below, 12.

Rosin, Gum

(USDA, per 100 lbs.)

	Fri. Feb. 5	Mon. Feb. 8	Tues. Feb. 9	Wed. Feb. 10	Thurs. Feb. 11
Drums—					
G		$11.80[1]	...	...	...
M	$11.75		...	...	...
N	...	12.00	...	...	...
WW	...	12.95	...	...	...
Bags—					
G		11.65[1]	...	...	...
WG	13.13	...	...	...	...

Tankcars (for week ended February 11)—M, $11.50; K or better, $11.50; K, $11.50

Sales, USDA

996*	1,227*	240*	304*	...

New York
(Per 100 lbs., c.l., Friday)
WW, $14.00; WG, $13.70[1] N, $13.40; K-M, $13.20

Turpentine, Gum

(USDA, per gal., 7.2 lbs.)

Price	.54	...	...	...
Sales	8,000¶	...	...	...

* Drums equivalent. ¶ Gallons. [1] Or better.

Carbon Black Producers Hook Up Europe Ventures

Columbian Carbon Company and Continental Carbon Company have made arrangements to consolidate two of their major European facilities.

In a joint announcement, the companies report that Columbian Carbon has purchased an interest in Continental's new 25-million-pound carbon black plant in Rotterdam, Holland, which will hereafter be operated as Continental-Columbian Carbon (Nederland) N. V.

At the same time, the companies report, Continental is being dealt in on the 60-million-pound plant being built by Columbian Carbon at Trecate, near Milan, Italy. This plant will be operated as Columbian Continental Europa S.P.A. Construction is expected to be completed in the late fall of 1960.

International marketing for both plants will be handled by Columbian Carbon International, Milan and Witco Chemical Company—the former acting for Columbian Carbon, the latter for Continental.

South African Urea Maker To Be in Operation by June

African Explosives & Chemical Industries, Ltd., plans on starting up operations at its now 110,000 ton urea plant—now abuilding at Modderfontein, Union of South Africa—by June. The facility is expected to make the union self-sufficient in nitrogenous fertilizers.

Polyethylene Producers

—Continued from page 5

articles of almost unlimited size in a relatively inexpensive mold.

What's the fascination? Things like ten-foot pleasure boats, 500-gallon tanks, molded furniture seats can now be made inexpensively with powdered polyethylene using the new process, to some extent carving into markets now held by the booming polyesters.

USI freely admits that finely-divided polyethylene is nothing new either here or in Europe. The company does point out, however, that development of powdered polyethylene applications appears to be much further along in Europe than here. Hence the adptation of European know-how.

Where Spencer is set to concentrate primarily on its Engel process development, USI is out to push its sales efforts over a wide area. Its biggest argument: pricing.

USI Sets Its Prices

Coarsely-ground powder is slated to sell at 40c. a pound now, and fine will list at 65c. a pound. The company claims that the price for coarse is at least 15c. below what's currently being offered, and it's so close to the price of the ordinary resin that it should be attractive to fabricators.

At least one other producer already in the business says that it finds USI's prices "interesting" and that without doubt it will meet competition.

USI, through studies of foreign technology and its own research, has gained some application know-how. According to the company's engineers, its "Microthene" can be applied in powder form or in water or alcohol dispersions and pastes.

Here's where USI is looking for markets:

- Textile coatings—"One of the largest potentials" for powders. Can be used in woven and non-woven fabrics.
- Metal coatings—Parts can be sprayed, dipped, slushed. Strippable coatings are also possible.
- Moldings—USI is also cocking an eye toward the large molding field.
- Other applications include the fluidized-bed technique for coating metal objects and wire, for coating paper, wood, auto seat covers and upholstery, as a wax additive, and in rubber to improve mold release.

Heisler Corporation, Wilmington, Del., has sold finely-divided polyethylene on the open market since 1956, and offers a line ranging from 4-250 mesh particle size. Prior to that, the firm's production went entirely to Delaware Barrel & Drum Corporation.

Other producers making, or having an interest in powdered polyethylene include Polymer Corporation of Pennsylvania, Reading, Pa., said to hold patents on the fluidized bed technique, and Michigan Chrome & Chemical Company, Detroit, Michigan.

One observer indicates that linear polyethylene producers can easily obtain powdered low-pressure polyethylene in their processes, since a solvent step in production will enable them to recover powder.

E. I. duPont de Nemours & Co., Wilmington, Del., has for several years offered "Alathon G," a polyethylene powder of somewhat coarser dimensions than the above materials.

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Petroleum Derivatives

The three way split in the supply position of the petroleum derivatives, that has been characteristic of the market for some time now, continues to be its main feature. Going right down the middle is the aliphatics. Supply and demand are in perfect balance; and reflect the accurate predictions made by producers as to production and consumer demand. The aromatics flank this ideal situation. Benzene's tightness is in sharp contrast to the looseness existing in the case of xylene and toluene. As the steel mills restored depleted stocks of the automobile manufacturers and metal fabricators, an increase in solvent demand was anticipated but as of the moment has not materialized.

For the immediate future, producers see no improvement coming from the present market conditions and will have to wear their three cornered hat as unflattering as it might be.

Production of crude petroleum in the United States averaged 6,982,000 barrels per day in November, an increase of 71,000 barrels per day on the October average of 6,911,000 barrels, reports the Bureau of Mines, United States Department of Interior. During the month the daily average production increased 32,000 barrels in Texas, 23,000 barrels in Oklahoma, and 16,000 barrels in Louisiana. A decrease of 12,000 barrels was recorded for Wyoming.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	Feb. 13, 1959
104.34	104.34	103.64	104.42

For Current Prices see Page 10

Aromatic Solvents

Benzene—This chronically scarce aromatic solvent remains unchanged in its price pattern and in its supply position. Both petroleum and cokeoven operators are turning out material in record amounts. Export orders take a considerable part of the market and should there be a falloff in overseas demand it seems likely that the effect would be a general loosening in supplies.

Nevertheless, the tightness that is felt so keenly by producer and consumer alike, should hang on well into the second or third quarter. Price patterns hold unchanged, with benzene moving under contract at 34c. a gallon. Spot material, when available continues to command premium rates often going above the 40c. a gallon rate in some areas.

Xylene—Despite the rapid return and sustained operations of the metal fabricators, solvent demand from this key industry has not supported the expectations of petroleum operators. Xylene is still in a long supply position. While some improvement is entertained for the future, no real change is expected for the next quarter.

Toluene—Most producers report stocks at more than ample levels. Supplies are considered problematic in most areas and increases in solvent demand which was hoped would provide some relief has proved to be only marginal. This surplus of material is only partly solved by the excess run into gasoline. Prices hold at the same levels as in previous weeks.

Aliphatic Solvents

Cleaner's Naphtha—Supplies are traditionally abundant, and against the prevalent demand is not much more than routine. Affected directly by seasonal shifts in consumption the present market is between the spurts in demand that usually come with changes in seasons. Prices in effect over recent months remain unchanged.

Hexane—Vegetable oil extraction operations, combined with industrial lacquer demand is maintaining steady demand for this solvent. Prices, for tankcars New Jersey and New York, are 20c. per gallon, while in Houston it remains 16c. per gallon.

Mineral Spirits—Paint industry demand for this most widely used solvent in the production of trade sales type paint products is holding up well. Demand for the odorless type receives continued calls due to the sustained activity of interior painting.

Overall mineral spirits demand is adversely affected by the competition from the water thinned interior finishes such as the various latex products. The latex paints have secured a rapidly growing segment of the market traditionally reserved for mineral spirits. While this trend has drained away some of the Winter time mineral spirits sales volume, most producers report that mineral spirits will still retain its dominant role in trade paint sales.

Crude Oil Stocks

Stocks of domestic and foreign crude petroleum at the close of the week ended January 30, totaled 248,777,000 barrels according to data reported by the Bureau of Mines. Compared with the total of 248,708,000 barrels the preceding week, this represents an increase of 69,000 barrels comprising a decrease of 227,000 barrels in stocks of domestic crude and an increase of 296,000 barrels in stock of foreign crude.

LPG's

The daily average production of natural gas liquids in November was 38.6 million gallons, an increase of 4 percent above October, 1959, according to the Bureau of Mines, United States Department of Interior. The daily average production of liquefied gases at refineries was 7.8 million gallons, 6 percent above October, 1959. The daily average demand for liquified gases for fuel and chemical uses was 30 million gallons, 17 percent above the October, 1959. Stocks of liquefied gases totaled 1,058 million gallons, 135 million gallons above a year ago. Underground stocks of liquefied gases totaled 875 million gallons, a decrease of 122 million gallons during November.

Isobutane—Plants accounted for 61,114 thousand gallons of this light pressed gas, while refineries added 504 thousand gallons, bringing the total to 61,618 thousand gallons as estimated by the Bureau of Mines, United States Department of Interior.

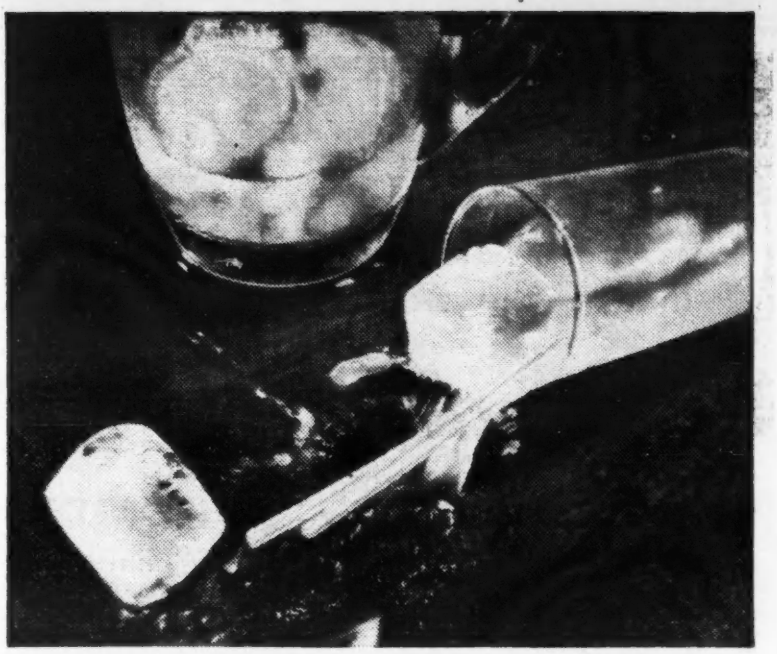
Butane-Propane Mixture—As reported by the Bureau of Mines production from refineries accounted for 6,762 thousand gallons for the month of November. Output from plants was set at 47,923 thousand gallons, for a total of 54,685 thousand gallons for November, 1959.

Miscellaneous

According to the Bureau of Mines, current reports of the industry for the week ended January 29, 1960, indicate a decrease in crude-oil production and a decrease in crude runs. According to the API, the daily average output of crude (including lease condensate) was 7,136,000 barrels, a decrease off 54,000 barrels from the preceding week. Daily average crude runs to stills of 8,149,000 barrels were 78,000 barrels below the preceding week, and 9,000 barrels above the week ended January 30, 1959. Runs of foreign crude amounted to 919,000 barrels daily, compared with 929,000 barrels in the preceding week. For the four-week period end-January 29, crude oil production averaged 7,146,000 barrels daily, and crude 7,146,000 barrels daily, and crude runs to stills averaged 8,269,000 barrels daily with runs of foreign crude averaging 937,000 barrels daily.

The American Petroleum Institute estimates that the daily average production of crude iil and lease condensate for the week ended January 29 was 7,136,160 barrels.

Reports received from refining companies indicate that the industry as a whole ran to stills on a Bureau of Mines basis approximately 8,149,000 barrels of crude oil daily and produced 27,570,000 barrels of gasoline; 2,428,000 of kerosine; 13,570,000 of distillate fuel oil and 6,884,000 of residual fuel oil during the week; and had in storage 203,184,000 barrels of finished and unfinished gasoline; 25,025,000 of kerosine; 126,485,000 of distillate fuel oil and 47,929,000 of residual fuel oil on January 29, 1960.



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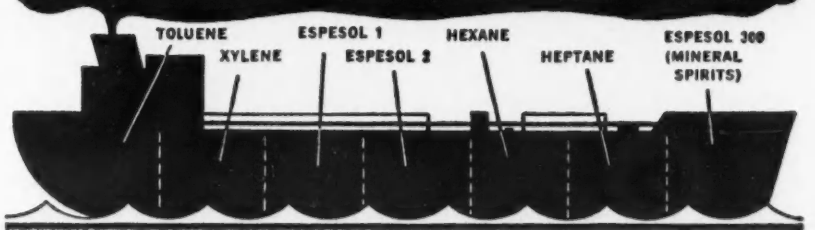

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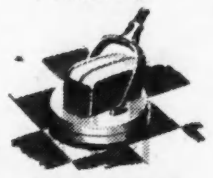

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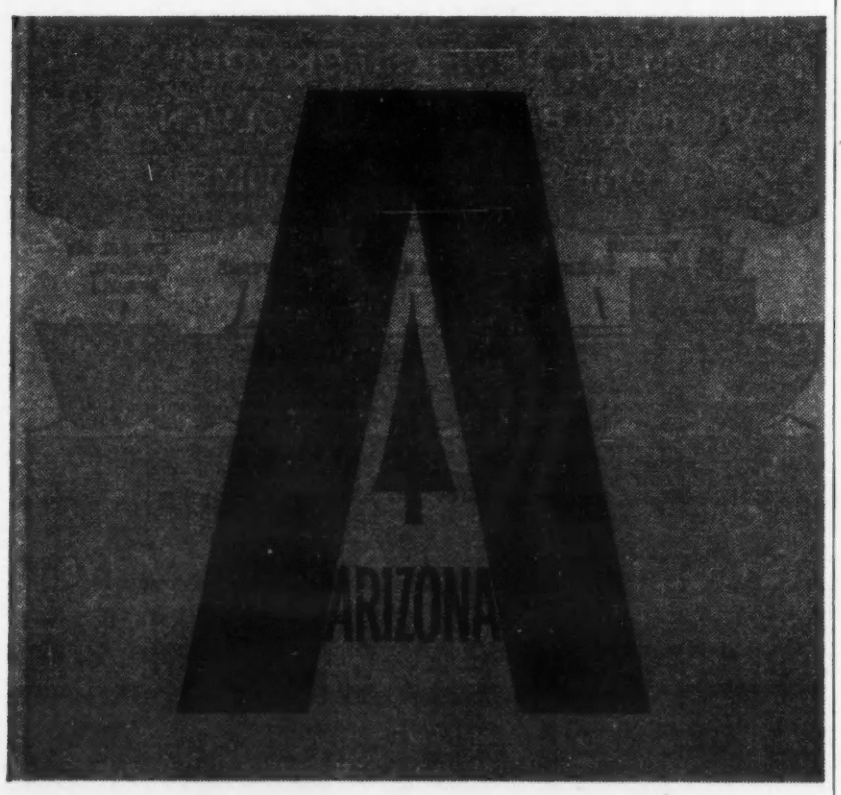

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Oils, Fats and Waxes

An easier tone prevailed in the edible grades last week. Corn and peanut dropped sharply, the former 1 cent per pound and peanut, ¾ cent per pound. Soybean oil also was unsettled and slightly lower, while cottonseed oil was quiet and unchanged. While new business in edible oils was light and spotty a good demand continued for delivery against former contracts. Crude coconut oil was easier with sales ¼ cent lower. Replacements of Spanish olive oil continue to advance because of the active demand from European buyers. Italy has been purchasing heavily, which was the chief factor in strengthening this market.

Easier tone prevailed in tallow and greases and better grades declined ⅛ cent per pound. Yellow grease and No. 1 and 2 tallow were unchanged.

Among industrial oils, imported castor oil was the firmest on the list. Sales of Brazilian oil was fairly active and some sellers raised quotations ¼ cent per lb. Offers from Brazil were extremely scarce and little improvement in offers for shipment was expected until the Fall months. Lower cost of oiticica oil for March forward has further weakened nearby delivery and spot stocks have declined ½ cent per pound. Steadier undertone was noted in the tung oil market and sellers were holding prices at unchanged levels.

Soybean meal was irregular and unchanged, while linseed meal was unsettled and $1 per ton lower. Cottonseed meal was dull and featureless.

The Department of Agriculture has fixed a $50,000 ceiling each on the 1959 total price support that a grower can obtain on his soybean, cottonseed, flaxseed and oats crop. Limits of $50,000 have been imposed on all price supported commodities, except crude pine gum, dairy products, wool, mohair, honey, and dry edible beans. To date the department has not decided upon a method by which a grower of tung nuts can reduce his output 20 percent.

Price Trends

Advanced
Candelilla wax, refd., 6c. to 7c. per lb.
Lard, cash, 1/10c. per lb.

Reduced
Carnauba wax, yellow, 4c. per lb.
Coconut oil, ¼c. per lb.
Copra, $2.50 per ton
Corn oil, crude, 1c. per lb.
Refd., 1c. per lb.
Grease, choice white, ½c. per lb.
Linseed meal, $1 per ton.
Oiticica oil, ½c. per lb.
Peanut oil, crude, ¾c. per lb.
Refd., ¾c. per lb.
Soybean oil, crude, ½c. per lb.
Refd., ½c. per lb.

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	Feb. 13, 1959
120.15	120.62	121.91	115.77

For Current Prices see Page 10

Vegetable Oils

Castor—Firm tone prevailed in imported oil. No. 1 Brazilian was scarcer on spot and ranged from 17¾c. to 18c. per pound, tankcars, New York, prompt delivery, depending upon seller. Trading was reported on this basis. Offers from Brazil continued scarce. No. 3, was ¼c. less, same basis. Domestic grades were quiet, but steady.

Imports of castor beans and castor oil at New York and Philadelphia last week were as follows:

	Pounds	
	Castor Beans	Castor Oil
Last week	799,950	1,200,000
Previous week	201,450	1,206,000
Corresponding week, 1959		600,000
Total this year	799,950	11,812,000
Corresponding period, 1959	5,946,250	10,702,000

Coconut—Crude was easier and sold at 17¼c. per pound, tankcars, f.o.b. Pacific coast, prompt shipment. The New York Market was also lower. Tankcars were quoted at 19c. per pound, for prompt delivery and 18½c., bulk, c.i.f. for February arrival. Resale government oil was held at 19c., tankcars, New York basis, prompt delivery.

Corn—Demand was light. Crude was lower and sold down to 13¼c. per pound, tankcars, f.o.b. mills, prompt delivery. Refined oil declined to 16.98c., tankcars, New York basis.

Cottonseed—Futures backed and filled under moderate commission house and local demand on the New York Produce Exchange last week. Market remained about steady with no special feature. Export situation was without improvement. Cash oil was quiet and unchanged. Refined salad was offered at 12½c. per pound, tankcars, New York, prompt delivery.

Trading in crude oil was light. Prices were without change and well held. In the southeast, prices ranged from 9½c. to 9⅝c. per pound, tankcars, f.o.b. mills

Oils and Fats: December

Following statistics are compiled by the Bureau of Census covering oils and fats production, consumption and factory and warehouse stocks in December, 1959 (in millions of pounds).

	Cottonseed Oil	Soybean Oil	Corn Oil	Peanut Oil	Lard	Edible Tallow
Production:						
Crude oils	226.7	369.2	26.3	[1]7.6	[1]267.0	25.4
Refined oils[2]	160.0	290.9	25.3	6.2	xxx	xxx
Consumption in refining[3]	175.4	304.1	26.7	6.6	xxx	xxx
Consumption in selected edible and inedible products[4], total	98.7	271.6	29.1	4.3	52.2	18.2
Salad or cooking oil	54.8	50.0	24.1	2.5	...	...
Margarine	13.4	108.0	(D)	(D)	4.5	0.5
Stocks, end of month[3], total	462.8	507.4	27.0	11.3	123.7	23.2
Crude oils	200.5	315.8	14.4	6.1	xxx	xxx
Refined oils	262.3	191.6	12.6	5.2	xxx	xxx

D—Withheld to avoid disclosing figures for individual companies.
Note: Total consumption of oils in each end product may exceed sum of detail since only major edible oils are shown separately.
[1] Source, U. S. Department of Agriculture. Lard production represents quantities rendered.
[2] Production of refined oils covers only once-refined oil. Degummed soybean oil is reported as crude oil.
[3] Includes hydrogenated fats (vegetable and animal) and other fats and oils "in process," (e.g. refined cottonseed includes stocks of stearin).

	Coconut Oil	Linseed Oil	Tallow & Grease	Tall Oil	Vegetable Foots
Production:					
Crude	34.7	[5]5.6	[5]264.4	62.7	26.7
Refined[2]	28.4	(NA)	xxx	10.2	xxx
Consumed in refining[3]	30.2	16.3	xxx	(D)	xxx
Consumption in selected edible and inedible products[4], total	[5]49.2	23.3	140.2	54.1	10.6
Consumption in inedible products, total	36.1	23.3	140.2	54.1	10.6
Soap	10.6	...	56.6	1.3	(D)
Paint or varnish	(D)	16.0	...	1.5	(D)
Fatty acids	7.6	0.3	33.6	45.0	6.3
Feed	....	...	34.0	...	1.2
Linoleum	...	2.3	....	(D)	....
Resins and plastics	0.3	1.4	...	(D)	...
Lubricants and similar oils	(D)	0.3	6.5	1.9	(D)
Stocks[6]	61.4	149.7	333.1	149.6	43.2
Crude oil	48.7	[6]105.0	xxx	131.7	xxx
Refined oils	12.7	[7]44.7	xxx	17.9	xxx

D—Withheld to avoid disclosing figures for individual companies.
NA—Not available.
[1] Raw linseed oil only.
[2] Quantities rendered.
[3] Production of refined covers only once-refined oils. Tall oil used in refining excludes quantity used in fatty acids.
[4] Includes hydrogenated fats (vegetable and animal) and other fats and oils "in process."
[5] Includes following amounts consumed as crude in December and November respectively: 16.6 and 17.5.
[6] Includes raw and boiled linseed oil.
[7] Includes linseed oil other than raw and boiled.

Oils and Fats: December (Continued)

Production:	Castor Oil	Tung Oil	Palm Oil	Palm Kernel Oil	Fish Oil	Marine Mammal Oil
Crude	(D)	8.5	xxx	...	2.3	...
Refined[1]	xxx	xxx	xxx	3.9	xxx	xxx
Consumed in refining[1]	xxx	xxx	xxx	4.4	xxx	xxx
Consumption in selected edible and inedible products[2], total	8.4	2.8	4.7	5.5	4.0	2.7
Consumption in edible products	(D)	...	(D)	(D)	...	...
Consumption in inedible products	(D)	2.8	(D)	(D)	4.0	2.7
Paint and varnish	1.3	2.0	....	....	(D)	....
Fatty acids	0.3	...	....	....	(D)	....
Resins and plastics	2.9	0.4	....	....	(D)	...
Lubricants and similar oils	0.4	....	0.2	...	0.2	2.0
Soap	(D)	...	(D)	(D)	...	...
Other inedible products	3.4	0.4	4.1	(D)	0.6	0.7
Stocks (crude and refined)[2]	35.4	39.1	10.1	8.3	66.0	46.5

D—Withheld to avoid disclosing figures for individual companies.
[1] Production of refined covers once-refined oils.
[2] Includes hydrogenated fats and other fats and oils in process.

Oils, Fats and Waxes

and oil was quoted at 9⅜c., Valley; 9¼c., Lubbock, and 9⅜c., Waco.

Linseed—Trading continued restricted to fill-in needs. Deliveries against contracts were fair. Raw oil was unchanged at 14c. per pound, tankcars, Minneapolis, February-April delivery; 14.2c., May-July, same basis and 15.11c., f.o.b. New York.

CCC has offered 5 million pounds of linseed oil for export only on a competitive bid basis. Bids to be received up to February 17 and acceptance February 18.

CCC owns 55,616,000 pounds of linseed oil acquired in a flaxseed crushing program last spring. These stocks have been offered for unrestricted use, either domestic or export basis since December 1 and bids ranging below domestic price have not been accepted.

Oiticica—Buying interest was confined to actual needs. Market was fairly steady at the lower level of 18¾c. per pound, tankcars, New York for nearby delivery. Forward delivery continued unsettled and nominal around 18c. for tankcars for March-April forward. Drums were quoted from 20¾c. to 21c. per pound, spot, according to quantity.

Olive—Active demand for Spanish oil from European buyers continued to strengthen replacements, while trading for US account was reported slow. The Spanish government has reduced the estimate of this year's crop to 500,000 tons from an earlier forecast of 600,000 tons. Exports from Spain during the past ten weeks were placed at 44,000 tons of which 32,000 tons went to Italy and only 3,300 tons to the US. Shipments were again raised $1 per 100 kilos. Riviera and refined were quoted at $52 to $53 per 100 kilos, drums, f.o.b. ports and Virgin ranged $53 to $55, same basis. On spot, the market was steady and unchanged at $2.30 to $2.50 per gallon, drums, duty paid as to quantity.

Peanut—Crude was easier and sold down to 15¼c. per pound, tankcars, f.o.b. southeast, prompt shipment. Refined oil was lower at 18½c., tankcars, New York basis.

Soybean—Crude was quiet and lower. Tankcars were quoted at 7⅝c. per pound, Decatur, unrestricted for prompt shipment. Refined salad was easier and available at 9.70c. per pound, tankcars, New York basis.

Tung—While trading was limited, the market remained unchanged and steady at 21¼c. to 21⅜c., per pound, tankcars, New York for nearby delivery, as to seller. Drums on spot ranged from 23¼c. to 23¾c., according to quantity.

Miscellaneous

Cocoa Butter—Demand was confined at actual needs. Prices ranged from 59c. to 64c. per pound, spot, as to quantity.

Copra—Shipments were lower. February shipment was quoted at $237.50 per ton c.i.f. Pacific coast, against bids of $235.

Fats and Greases

Greases—Market was easier and choice white declined ⅛c. to 6⅛c. to 6¼c. per pound tankcars delivered, while yellow grease was unchanged at 5c. same basis.

—Continued on page 62

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ALUMINUM HYDRATE—25 dms, Leading Forwarders, Marseille
ALUMINUM OXIDE—121 bgs, Rotterdam
AMINOACETIC ACID—20 dms, Fallek Products Co, Hamburg
70 cks, Leading Forwarders, Antwerp
AMYLOPECTIN—800 bls, Stein Hall & Co, Rotterdam
ANILINE DYES—86 dms, H Bruckmann & Lorbacher, Hamburg
114 dms, Putnam Chemical Corp, Hamburg
11 dms, Carbic Color & Chemical Co, Rotterdam
5 dms, Geigy Chemical Corp, Bremerhaven
30 dms, Sandoz Inc, Havre
4 dms, H Bruckmann & Lorbacher, Bremen
48 dms, Rotterdam
ANNATTO SEED—25 bgs, Foreign Domestic Distributors, Callao
ANTHRAQUINONE—3 dms, Francolor Inc, Havre
ANTIMONY REGULUS—905 cs, Rijeka
ARSENIC, WHITE—129 bbls, American Smelting & Refining Co, Tampico
ASCORBIC ACID—6 dms, Havre
BARIUM CHLORIDE—220 bgs, Antwerp
BARIUM NITRATE—120 dms, Dunlop Rubber Co, Havre
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26 bgs, General Import Distributors, Havana
180 bgs, Djibouti
113 bgs, Santiago
52 bgs, Tampico
BELLADONNA LEAVES—87 bls, Meer Corp, Hamburg
BENZOSULFIMIDE—20 dms, Chemical Bank, Yokohama
BERBERIS ROOT—28 bls, S B Penick & Co, Rijeka
94 bls, Herbarium Inc, Rijeka
BERGAMOT OIL—23 hf cs, Messina
BONE—533 bgs, Brisbane
BONE ASH—100 bgs, Hamburg
BONE BLACK—250 bgs, Riches Nelson, Rotterdam
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CALCIUM CARBONATE—800 bgs, Pluess Staufer, Antwerp
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CANDELILLA WAX—188 bgs, Frank B Ross, Tampico
CARAWAY SEED—200 bls, Louis Furth, Rotterdam
200 bgs, C M Van Sillevoldt, Rotterdam
300 bgs, Rotterdam
CARBON TETRACHLORIDE—60 dms, Hamburg
CARNAUBA WAX—111 bgs, Frank B Ross, Fortaleza
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CASTOR BEANS—1,104 bgs, Baker Castor Oil Co, Guayaquil
362 bgs, Baker Castor Oil Co, Manta
CASTOR OIL—300 tons, Brazilian Industrial Oils Inc, Fortaleza
300 tons, Brazil Oiticica Inc, Fortaleza
CEDAR OIL—1 dm, Roubechez Inc, Marseille
CELERY SEED—170 bgs, M J Golombeck, Bombay
170 bgs, Fritzsche Bros, Bombay
609 bgs, C Czarinkow, Bombay
CHESTNUT EXTRACT—300 bgs, Barkey Importing Co, Naples
CINNAMON LEAF OIL—2 dms, Volkart Bros, Colombo
CITRONELLA OIL—68 dms, George Uhe Co, Keelung
50 dms, Magnus Mabee & Reynard, Keelung
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CLOVE OIL—14 dms, R Webb & Co, Tamatave
11 dms, Magnus Mabee & Reynard, Tamatave
20 dms, Norda Essential Oil & Chemical Co, Tamatave
22 dms, Ungerer & Co, Tamatave
10 dms, A Verley & Co, Tamatave
9 dms, George Lueders & Co, Tamatave
9 dms, Givaudan Corp, Tamatave
5 dms, Kellys America Ltd, Tamatave
9 dms, Tamatave
COBALT OXIDE—161 cks, Antwerp
COCONUT OIL—395 tons, American Trust Co, Manila
COCONUT SHELL CHARCOAL—20 bgs, H S Trading Society, Tuticorin
COPAL GUM—298 bkts, O G Innes Corp, Macassar
202 bkts, S Winterbourne & Co, Macassar
136 bkts, Wm H Scheel, Macassar
35 bgs, O G Innes Corp, Singapore
CORIANDER SEED—500 bgs, K H Landes & Co, Casablanca
CORN STARCH—3,435 bgs, Impex Agricultural Commodities, Rijeka
254 bgs, Manhattan Adhesives Corp, Antwerp
100 bgs, Connells Rice & Sugar Co, Rotterdam
5,200 bgs, Antwerp
150 bgs, Rotterdam
CUTTLEFISH BONE—300 cs, Venice
CYANURIC CHLORIDE—50 dms, Geigy Chemical Co, Yokohama
DAMMAR GUM—28 bgs, Archer Daniels Midland Co, Singapore
154 bgs, O G Innes Corp, Singapore
56 bgs, O G Innes Corp, Bangkok
DEGRAS—65 dms, Bankers Trust Co, Fremantle
51 dms, Silvey Shipping Co, Brisbane
54 dms, Silvey Shipping Co, Kobe
DEXTRIN—275 bgs, Manufacturers Trust Co, Rotterdam
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FURFURAL—898 tons, E I Dupont De Nemours & Co, La Romana
GENTIAN ROOT—100 bgs, Rijeka
GERANIUM OIL—10 dms, J Manheimer, Tamatave
3 dms, Lautier Fils Inc, Tamatave
3 dms, A Chiris & Co, Algiers
GINGER—160 bgs, K H Landes & Co, Cochin
145 bgs, Lagos
GLUE—370 cs, Henneux Co, Rotterdam
470 bgs, Jung Forwarding Co, Newport
50 dms, Corbett & Co, Marseille
GLUE, BONE—1,200 bgs, First National Boston, Hamburg
226 bgs, Manufacturers Trust Co, Rijeka
GLYCERINE—83 dms, R P Casado, Havana
GRAPHITE—1,250 bgs, Joseph Dixon Crucible Co, Tamatave
2,500 bgs, C Pettinos, Tamatave
5,500 bgs, Asbury Graphite Mills, Tamatave
250 bgs, Bankers Trust Co, Tamatave
GUAR GUM—100 bgs, T M Duche & Sons, Genoa
400 bgs, Wedeman & Godknecht, Genoa
50 bgs, Colony Import & Export Corp, Genoa
700 bgs, Morningstar Paisley Inc, Genoa
GYPSUM, CRUDE—10,166 tons, U S Gypsum Co, Hantsport
HEXACHLOROETHANE—200 bgs, Henley & Co, Hamburg
HOOF & HORNMEAL—1,039 bgs, A M Goldstein, Buenos Aires
2,191 bgs, Ossa Products Corp, Buenos Aires
HORNMEAL—1,000 bgs, Transatlantic Animal By-Products Corp, Hamburg
HYDROXYETHYL CELLULOSE—23 dms, Union Carbide Co, Southampton
IODINE, CRUDE—800 kgs, Chilean Nitrate Sales Corp, Tocopilla
IPECAC ROOT—11 bgs, Gillespie & Co, Cristobal
JAPAN WAX—25 cs, Mitsubishi International Corp, Kobe
KARAYA GUM—776 bgs, Colony Import & Export Corp, Bombay
684 bgs, Stein Hall & Co, Bombay
127 bgs, Morningstar Paisley Inc, Bombay
132 bgs, P A Dunkel, Bombay
61 bgs, T M Duche & Sons, Bombay
30 bgs, Max Van Pels, Bombay
KOLA NUTS—200 bgs, D Steengrafe & Co, Kingston
LACTIC ACID—40 djns, E F Drew & Co, Hamburg
LACTOSE—5 bbls, R J Saunders & Co, Hamburg
LAVENDER OIL—3 dms, Alpine Aromatics Inc, Marseille
10 dms, Marseille
LAVENDER OIL, SPIKE—5 dms, L A Champon & Co, Barcelona
LEAD NITRATE—3 bgs, S A Minerals & Merchandise Corp, Antwerp
LEAD, RED—600 bgs, Rotterdam
LEAD, WHITE—200 bgs, Rotterdam
LEMON OIL—3 dms, Ungerer & Co, Vera Cruz
20 hf cs, National City Bank, Messina
10 cs, Messina
LEMONGRASS OIL—12 dms, Ungerer & Co, Cochin
18 dms, Maywood Chemical Works, Cochin
12 dms, Givaudan Corp, Cochin
LIME OIL—1 dm, Citrus & Allied Essential Oils Co, Puerto Plata
10 dms, Fritzsche Bros, Hamilton
20 dms, Port Au Prince
LITHARGE—276 dms, Eagle Picher Co, Tampico
LOCUST BEAN GUM—100 bgs, Nehls & O'Connell, Genoa
200 bgs, T M Duche & Sons, Rotterdam
200 bgs, Morningstar Paisley Inc, Genoa
LOGWOOD EXTRACT—151 cks, American Dyewood Co, Kingston
LIVER POWDER—32 bbls, Van Gelder Fanto Corp, Buenos Aires
MACE—40 cs, K H Landes & Co, Macassar
117 cs, Ludwig Mueller, Macassar
28 cs, Hismoco American Co, Macassar
102 cs, Magna Enterprises, Macassar
MAGNESIA, FUSED—28 dms, Crucible Steel Co, Rotterdam
MAGNESIUM CARBONATE—60 cs, Lo Curto & Funk, Antwerp
MAGNESIUM CARBONATE—32 cs, Chas L Huisking & Co, Genoa
MENTHOL—95 cs, Schwabach & Co, Santos
20 cs, Magnus Mabee & Reynard, Hamburg
40 cs, Magnus Mabee & Reynard, Keelung
6 dms, Fritzsche Bros, Buenos Aires
dl-METHIONINE—10 dms, Madison Lewis Inc, Genoa
MOLASSES—555 tons, W R Grace & Co, Salaverry
MUSK, ARTIFICIAL—9 dms, Roure-Dupont Inc, Rotterdam
MUSTARD SEED—660 bgs, C Gulden, Massawa
MYROBALANS—736 bgs, First National Chicago, Bombay
NAPHTHALENE—386 bgs, Allied Chemical Corp, Avonmouth
512 bgs, Witco Chemical Co, Avonmouth
2,114 bgs, Gallard Schlesinger, Antwerp
709 bgs, Gallard Schlesinger, Hamburg
NAPHTHOL—13 dms, Wedeman & Godknecht, Bremen
80 dms, Rotterdam
NIGER SEED—116 bgs, Hartz Mountain Corp, Massawa
68 bgs, Prunty Seed & Grain Co, Bombay
NUTMEG—218 bgs, P H Petry, Hamburg
67 bgs, P H Petry, Macassar
134 bgs, K H Landes & Co, Macassar
267 bgs, Ludwig Mueller, Macassar
40 bgs, Hismoco American Co, Macassar
210 bgs, K H Landes & Co, Singapore
12 bgs, Gillespie & Co, Port of Spain
OCHRE—448 bgs, Whittaker Clark & Daniels, Capetown
224 bgs, Capetown
OITICICA OIL—250 tons, Brazilian Industrial Oils Inc, Fortaleza
OLIBANUM GUM—80 bgs, Max Van Pels, Massawa
OLIVE OIL—50 dms, J Victori & Co, Barcelona
100 dms, Atlantic Bank of N Y, Barcelona
30 dms, Irving Trust Co, Barcelona
50 dms, Bankers Trust Co, Barcelona
OPIUM—100 cnts, Calcutta
ORANGE OIL—3 dms, Citrus & Allied Essential Oils Co, Puerto Plata
OURICURY WAX—96 bgs, Bank of N Y, Salvador
PALM OIL—400 tons, Balfour Guthrie, Matadi
PALMAROSA OIL—4 pots, J Manheimer, Bombay
PALMKERNEL OIL—43 dms, Rotterdam
PAPAIN—102 cs, Bemo Shipping Co, Mombasa
80 cs, Meer Corp, Mombasa
200 cs, Mombasa
PAPRIKA—100 bgs, Gel Spice Co, Hamburg
200 bgs, M J Golombeck, Hamburg
100 bgs, H Marmorek & Son, Lisbon
798 bgs, Istanbul
798 bgs, Casablanca
PATCHOULI OIL—17 cs, J Berlage, Penang
17 cs, Penang
PENTANE—1 cs, Okura Trading Co, Yokohama
PEPPER, BLACK—240 bgs, Berns & Koppstein, Cochin
80 bgs, Ludwig Mueller, Cochin
480 bgs, George Uhe Co, Cochin
160 bgs, Daarnhower & Co, Cochin
160 bgs, Fritzsche Bros, Cochin
720 bgs, Atlanta Textile Corp, Cochin
1,600 bgs, A G Dunn, Cochin
160 bgs, M J Golombeck, Cochin
320 bgs, Mutual Spice Co, Cochin
960 bgs, East India Trading Co, Cochin
1,200 bgs, Otto Gerdau, Cochin
240 bgs, C M Van Sillevoldt, Cochin
480 bgs, California Commodities Corp, Cochin
880 bgs, East India Trading Co, Alleppey
240 bgs, C M Van Sillevoldt, Alleppey
720 bgs, A G Dunn, Alleppey
160 bgs, C Czarinkow, Alleppey
160 bgs, Catz American Co, Cochin
240 bgs, Atlanta Textile Corp, Alleppey
160 bgs, Produce Dealers, Alleppey
480 bgs, Otto Gerdau, Alleppey
160 bgs, Reliable Mercantile Corp, Cochin
80 bgs, Delano Corp of America, Cochin
160 bgs, Internatio Rotterdam, Cochin
280 bgs, A G Dunn, Singapore
320 bgs, Daarnhower & Co, Alleppey
40 bgs, Chase Manhattan Bank, Singapore
7,760 bgs, Alleppey
2,880 bgs, Cochin
235 bgs, Singapore
400 bgs, Santos
80 bgs, Bombay
PEPPER, RED—50 bgs, R T French, Kobe
150 bgs, California Commodities Corp, Kobe
50 bgs, M J Golombeck, Kobe
PEPPER, WHITE—70 bgs, K H Landes & Co, Singapore
70 bgs, A G Dunn, Singapore
210 bgs, Singapore
400 bgs, Santos
PEPPERMINT LEAVES—231 cs, Meer Corp, Hamburg
PERCHLOROETHYLENE—130 dms, International Selling Corp, Marseille
PHTHALIC ANHYDRIDE—1,000 bgs, Peabody & Lane, Antwerp
PIMENTO LEAF OIL—2 dms, Fritzsche Bros, Kingston
POLLACKLIVER OIL—10 dms, National City Bank, Yokohama
POLYVINYL CHLORIDE RESIN—1,200 bgs, H Bedos & Co, Yokohama
POTASSIUM CYANIDE—300 dms, Ugine Industries, Havre
50 dms, Bremerhaven
POTASSIUM FERROCYANIDE—500 bgs, Haras Co, Rotterdam
POTATO STARCH—200 bgs, Rotterdam
PRUSSIAN BLUE—60 dms, Transatlantic Pigment Corp, Rotterdam
PSYLLIUM SEED, HUSKS—340 bgs, T M Duche & Sons, Bombay
122 bgs, Bemo Shipping Co, Bombay
861 bgs, S B Penick & Co, Bombay
152 bgs, Meer Corp, Bombay
QUEBRACHO EXTRACT—3,057 bgs, Barkey Importing Co, Buenos Aires
548 bgs, Tan American Corp, Buenos Aires
QUINIDINE SULFATE—3 dms, Hamburg
QUININE SULFATE—30 dms, Lo Curto & Funk, Hamburg
RAUWOLFIA ROOT—24 bgs, Hamburg
SAGE LEAVES—180 bls, M J Golombeck, Piraeus
400 bls, Rijeka
150 bgs, Trieste
SAGE OIL—3 bbls, S B Penick & Co, Rijeka
3 bbls, Fritzsche Bros, Rijeka
SANDALWOOD—100 bgs, National City Bank, Bombay
SANDALWOOD OIL—7 cs, Fritzsche Bros, Bombay
7 cs, Van Ameringen Haebler, Bombay
9 cs, Lo Curto & Funk, Cochin
7 cs, Lo Curto & Funk, Bombay
10 cs, Essential Oils Inc, Cochine
SEEDLAC—300 bgs, Capital Shellac Corp, Bangkok
750 bgs, East Asiatic Co, Bangkok
250 bgs, Mantrose Corp, Bangkok
850 bgs, Calcutta
SENNA LEAVES—62 bls, S B Penick & Co, Port Sudan
SESAME SEED—448 bgs, J Bieler, Bombay
SESAME SEED, HULLED—250 bgs, Louis Furth, Cristobal
SHELLAC—454 bgs, I Levine, Hamburg
40 cks, F H Paul & Stein Bros, Rotterdam
106 bgs, F H Paul & Stein Bros, Rotterdam
200 bgs, Calcutta
SODIUM ALUMINATE—8 bgs, Tar Residuals Inc, Rotterdam
SODIUM CYANIDE—200 dms, Ugine Industries, Havre
SODIUM CYCLAMATE—20 dms, Chemical Bank, Yokohama
SODIUM SILICOFLUORIDE—450 bgs, Copenhagen
SPEARMINT LEAVES—100 cs, Alexandria
STARCH—600 bgs, Morningstar Paisley Inc, Rotterdam
STRAMONIUM LEAVES—83 bls, Prentiss Drug & Chemical Co, Hamburg
STYRAX GUM—13 cs, Polak Frutal Works, Hamburg
26 cs, L A Champon & Co, Izmir
SULFUR, CRUDE—11,000 tons, Allied Chemical Corp, Coatzacoalcos
TAMARINDS—100 bgs, N Trading Co, Tuticorin
TAPIOCA—330 bgs, Berneo International Corp, Itajai
100 bgs, Madagascar Agencies, Tamatave
TAPIOCA FLOUR—1,900 bgs, Stein Hall & Co, Kohsichang
670 bgs, H F R Dolan Jr, Kohsichang
650 bgs, Geismar & Co, Kohsichang
1,250 bgs, Manhattan Adhesives Corp, Itajai
400 bgs, American Key Products, Itajai
1,008 bgs, Kohsichang
TARTARIC ACID—200 bgs, Nvlos Trading Co, Palermo
83 bgs, Frank Samuel & Co, Marseille
THALLIUM SULFATE—2 cs, Hudson Shipping Co, Hamburg
THIOUREA—400 bgs, Browning Chemical Corp, Kobe
THYME LEAVES—100 bls, Kellys America Ltd, Marseille
THYMOL—6 bbls, Hamburg
TOLU BALSAM—10 cs, Irving Trust Co, Barranquilla
TRICHLOROETHYLENE—100 dms, International Selling Corp, Marseille
10 cans, Brauner & Co, Hamburg
TURMERIC—334 bgs, M J Golombeck, Kobe
112 bgs, L E Ransom, Cochin
UNDECYLENIC ACID—25 dms, International Selling Corp, Marseille
UREA—1,000 bgs, Nvlos Trading Co, Genoa
2,000 bgs, H J Baker & Bro, Antwerp
702 bgs, Rotterdam
VALERIAN ROOT—241 bgs, Bombay
VANILLA—26 dms, Zink & Trieste, Marseille
VANILLA BEANS—23 cs, Otto Gerdau, Tamatave
49 cs, George Uhe Co, Tamatave
57 cs, Dammann & Co, Tamatave
92 cs, L A Champon & Co, Tamatave
11 cs, Frank Tea & Spice Co, Tamatave
333 cs, Gillespie & Co, Tamatave
22 cs, H Schroder, Tamatave
48 cs, First National Boston, Tamatave
13 cs, National City Bank, Tamatave
22 cs, J Manheimer, Tamatave
115 cs, Lo Curto & Funk, Tamatave
84 cs, Williams Clark Co, Tamatave
18 cs, Gillespie & Co, Hamburg
75 cs, L A Champon & Co, Tandjong Priok
10 cs, Zink & Trieste, Marseille
117 cs, Madagascar Agencies, Tamatave
113 cs, Morningstar Paisley Inc, Tamatave
276 cs, F Huber & Co, Tamatave
237 cs, Tamatave
VETIVER OIL—1 dm, Lo Curto & Funk, Cochin
1 dm, Roure-Dupont Inc, Port Au Prince
1 dm, Polarome Manufacturing Co, Port Au Prince
WATTLE BARK—360 bls, Olson Importing Co, Durban
1,100 bls, Olson Importing Co, East London
WATTLE EXTRACT—534 bgs, Barkey Importing Co, Durban
400 bgs, Hammond & Carpenter, Durban
2,603 bgs, Elkan River Plate Corp, Durban
p-XYLOL—2 dms, Eastman Kodak Co, Bremen
ZINC WHITE—800 bgs, Philipp Bros Chemicals, Antwerp
40 bgs, Revelli Chemical Co, Antwerp
ZINC YELLOW—200 bgs, Revelli Chemical Co, Antwerp

Philadelphia

ARGOLS—448 bgs, Tartaric Raw Materials, Marseille
CALCIUM CARBONATE—1,800 tons, Camden Chalk Co, London
CASEIN—1,060 bgs, Melbourne
PEATMOSS—250 bls, Marine Midland Trust Co, Hamburg
500 bls, Premier Peatmoss Corp, Hamburg
QUEBRACHO EXTRACT—1,078 bgs, Tanimex Corp, Buenos Aires
YACCA GUM—75 bgs, Chemical Bank, Port Adelaide

San Francisco

BONEMEAL—1,181 tons, Stauffer Chemical Co, Rosario
232 tons, Stauffer Chemical Co, Buenos Aires
CALCIUM CHLORIDE—1,000 bgs, P W Bellingall, Antwerp
CODLIVER OIL—3 dms, Randal Nutritional Lab, Stavanger
COPRA—500 tons, Cargill Inc, Dipolog
588 tons, Cargill Inc, Bulan
1,085 tons, Cargill Inc, Legaspi
500 tons, Cargill Inc, Masbati
500 tons, Cargill Inc, Pangi
FISHMEAL—4,420 bgs, Thornley & Pitt, Lirquen
4,410 bgs, Marine & Animal By-Products Corp, Arica
4,348 bgs, Albumina Supply Co, Iquique
2,203 bgs, Albumina Supply Co, Arica
2,229 bgs, Chimbote
GYPSUM, CRUDE—10,083 tons, Kaiser Gypsum Co, San Marcos
LIVERMEAL—465 bgs, International Packers Ltd, Buenos Aires
NUTMEG—38 bgs, Magna Enterprises, Singapore
OREGANO—573 bgs, T P Gonzales, Ensenada
PEPPER, BLACK—70 bgs, Singapore
300 bgs, Port of Spain
PETROLEUM, CRUDE—285,892 bbls, Tidewater Oil Co, Mina Saud
POPPYSEED—100 bls, Durkee Foods, Amsterdam
SAVORY LEAVES—15 bls, H M Newhall & Co, Marseille
SODIUM BICARBONATE—100 bgs, C M Chemicals Inc, Liverpool
SODIUM CYANIDE—100 dms, C M C Chemicals Inc, Liverpool
TALC—500 bgs, Charles Mathieu, Genoa
TANKAGE—140 bgs, Tupman Thurlow, Montevideo
TETRAETHYL LEAD—14 dms, E I Dupont De Nemours & Co, Kobe
TRICHLOROETHYLENE—1,200 dms, C M C Chemicals Inc, Liverpool
VANILLA BEANS—2 cs, Williams Dimond & Co, Papeete

THE FMC RENTAL PURCHASE PLAN LETS *YOU* TRY IT BEFORE *YOU* BUY IT

FATTY ACID DISTILLATION SYSTEM

Includes Ni-Resist Still Pots, Monel and Steel Tanks, Stainless Heat Exchanger, Condensers, Receivers, BOILER, Jet and Booster Ejectors, Pumps, Filters and accessories. Send for complete details.

FILTERS

Oliver Continuous Rotary Panel Type Vacuum Filters; 8'x8' and 8'x10'.

Oliver Monel Pre-Coat Cont. Rotary Pressure Filters; 3'x2' complete.

Oliver Dorrco Rotary Vacuum Filter 6'x3' with Nickel contact Parts.

Bird Young Rotary Vac., Filter 4'x4'; Stainless.

Feinc String Type Rotary Vacuum Filters; 6' x 6'; 8' x 10'; Stainless Contacts; Oscillating Agitators.

Sweetland Pressure Filters No. 2 to 12.

Enzinger Stainless Vert. Pressure Filter 18" x36"; ASME; 24 sq. ft. filter area.

Shriver Aluminum Filter Presses; 7" & 10" & 30", 36".

Sperry Stainless Filter Presses in sizes 12", and 18".

Ni-Resist and Nickel Filter Presses in sizes, 10" and 18".

Shriver and Sperry Cast Iron Presses from 12" to 42".

OUTSTANDING SELECTIONS

A. O. Smith Stainless Lined Pressure Tanks; 10' x 18'7"; 11,000 gal.

Stainless Steel Heat Exchangers, 35 sq. ft. to 1000 sq. ft. surface.

Fitzpatrick Stainless Steel Mills, Models JT, "C", "D" and "K".

Mikro Pulverizers, all size to No. 4.

Raymond IMP Mills Models, "0000", No. 10, 47 and 50; some Stainless.

Tablet Presses by Stokes, Colton, Kux, Single and Rotary Models.

Rotex and Ro-Ball Sifters-Screens, Single & Multiple to 40" x 120".

FOAM LATEX PLANT

EQUIPMENT STILL INSTALLED WHERE USED—BUFFALO, N.Y.

2 Adamson 16' Vulcanizers.

3 Roll Calendar; 22" x 58".

Mechanical Dryer; 160' Long.

Aut. Washer for Latex Pads.

21 Truck Dryer; 7' x 12' x 100'.

12 Truck Dryer; 11' x 15' x 30'.

Abbe Pebble Mills with Motors; 60" x 72"; 45" x 48"; 37" x 48".

33 Mix Kettles & Tanks; all szs.

F-B 2 Roll Rubber Mills, 14" x 30"; 16" x 42"; 18" x 42"; 22" x 60".

Baker Perkins Mixers to 300 Gal.

Banbury Type B Lab Mixer.

6 Southwark Hydraulic Presses, 36" x 36"; 14" Ram; 8" Stroke.

2 Dunning-Boschert Hydr. Presses, 36" x 36"; 12" Ram; 48" Daylight.

3 French Oil Mill Presses, 28" x 30"; 10" Ram; 28" Daylight.

Stokes Aut. Molding Presses No. 252; 150 Ton & 300 Ton.

EXTRUDERS: 2 Royle No. 1, Allen 2"; NRM1½" Crosshead.

To arrange Inspection
Phone STerling 8-4672

A BATTERY OF
A.T.&M. 60"
TYPE 316
STAINLESS CENTRIFUGALS
CENTER SLUNG SUSP.

CENTRIFUGES

Bird Continuous Conical Hor. Centrifuges; 18", 24", S.S. & Monel.

Sharples H2 Nozzlejector; 15 HP XPL Motor; 1000 GPH.

Sharples Model M4 P Super Centrifuges in MONEL.

De Laval Type 316 Stainless Hermetic Separator VO-244.

DRYERS—EVAPORATORS

S/S Lined Rotary Dryer 50" x 20' with Burner, Combustion Chamber, etc.

Stokes Rot. Jktd. Dryer 18" x 8'.

Bagley & Sewell Double Drum Dryer 28" x 60" complete.

Buflovak Dbl. Drum Dryer 40" x 120" with accessories.

Struthers Wells Stainless Drum Dryer; 5' x 4' like new complete.

Zaremba Dbl. Effect INCONEL Evaporator 430 sq. ft. surface.

Swenson Quadruple Effect Long Tube Evaporator; film type.

Pfaudler Glass Lined and Stainless Evaporating Dishes; 5' and 6' dia.

Devine Vacuum Shelf Dryer; 40" x 50".

REACTORS

Nickel Clad Reactor; 7' x 11'6" Manhole; Jacketed and Agitated.

Patterson 1000 Gal. Closed Jktd. Steel Mixing Kettle; 20 HP.

Three Stage Continuous Agitated Reactor; 3 Vessels 4' x 20'.

Type 316 Stainless Separator Tanks; 42" x 10'; Dished Heads.

A. O. Smith Stainless Lined Pressure Tanks; 10' x 18'7"; 11,000 Gal.

Heavy Duty Aluminum Tank; 5000 Gal.; 8' x 12'; 30 PSI ASME.

Pfaudler Glass Lined, Jktd. Reactors to 1000 Gal.

Struthers Wells 2000 Gal. Stainless Steel Reactor.

Majonnier Stainless Vacuum Pans 3' x 10'; 6' x 12'.

Harris Stainless Coil Heated Vac. Pan; 6' Diameter.

Lancaster Stainless Lined Rot. Jktd. Reactor; 50" x 17'4".

LIQUIDATION PAINT PLANT

J. H. Day 40 Gal. Pony Mixers.

200 Gal. Paragon Paint Mixers.

High Speed and Regular Mills (3 Roll) 14" x 30" and 16" x 40".

Paint Riddles, Agitators, Tanks.

NEW FALCON RIBBON BLENDERS

always in stock in Mild Steel or Stainless in all sizes up to 400 cubic feet.

SEND FOR OUR LATEST ISSUE "FIRST FACTS"

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FMC

BRILL FOR VALUES

REACTORS — EVAPS — CONDS — TANKS

2—Pfaudler 50 gal. 316 S.S. jacketed, agitated Reactors.
1—Condenser Service 650 gal. 304 S.S. closed Kettle, 5' x 4', with 100 sq. ft. bayonet heater.
1—1400 gal. Blaw-Knox, steel, jacketed, agitated Reactor.
2—2000 gal. Struthers Wells 316 S.S. jacketed, agtd. Reactors.
2—3200 gal. 304 S.S., jacketed, agitated Kettles.
1—550 sq. ft. Buflovak, monel single effect Evaporator.
1—7500 gal. 316 S.S. Vert. Storage Tank, 7' x 25', 50 psi.
1—750 gal. nickel clad Mixing Tank, 125# nickel coils.
1—4000 gal. Haveg Vert. Tank 8' x 12'.
1—1500 gal. Stainless Pressure Tank, 5' x 10', 90#.
1—10,000 gal. rubber lined Tank, 8' x 25'8".
1—12,000 gal. horiz. steel Pressure Tank, 7'6" x 36', 200 psi.
1—17,850 gal. 304 S.S. Storage Tank, 9' x 36'.
6—Stainless Heat Exchangers: 1220, 786, 536, 396, 315, 250 sq. ft.
1—24" dia. x 35', 304 S.S. Bubble Cap Column.
1—30" dia. x 20', 304 S.S. Bubble Cap Column.

CENTRIFUGES

2—Baker Perkins 36 HS TerMeer S.S. continuous.
1—Sharples C-27 Super-D-Hydrator, 316 S.S.
1—Bird 18" x 28", 316 S.S. Solid Bowl, Continuous.
1—Bird 18" x 28", steel, Solid Bowl, NEW, Continuous.
1—Bird 36" x 50", 347 S.S. Solid Bowl, Continuous.
2—Sharples PY14, PN14, Super-D-Canters, 316 S.S.
1—Tolhurst 32" Suspended, 316 S.S., imperforate basket.
2—AT&M 48" Suspended, 316 S.S. basket.
2—Sharples #16, 304 S.S., 3 HP motor.

MIXERS

1—#12 Sturtevant 304 S.S. Rotary Mixer, 450 cu. ft.
1—Baker Perkins #16TRM, 150 gal. jktd., Vac. 60 HP.
5—Day "Cincinnatus" double arm, 250 and 100 gal.
1—1500# Powder Mixer, 7½ HP XP motor.
2—Steel, jktd. Powder Mixers, 225 and 350 cu. ft.
2—18" x 36" Simpson Intensive Mixers.

DRYERS

3—Buflovak Vacuum Shelf, 20—60" x 80" shelves.
1—Devine Vacuum Shelf with 19—59" x 78" shelves.
1—Devine Vacuum Shelf with 10—40" x 43" shelves.
2—Buflovak 42" x 120", atmospheric, double drum.
2—Devine 5' x 12', 4' x 9', single drum, atmospheric.
1—Baker Perkins 5'6" x 6' Rotary Vacuum Dryer.
1—Louisville 6' x 45' S.S. Rotary Steam Tube Dryer.
1—Louisville 54" x 35', Monel Rotary Steam Tube Dryer.
2—Louisville Rotary Steam Tube 6' x 25', 6' x 50'.
9—Rotary Dryers, 34" x 30', 4' x 40', 6' x 50', 6' x 60', 7' x 80', 8' x 87'.
2—Louisville 8' x 50' Stainless Steel lined Rotary Dryers.
1—Traylor 30" x 18' Stainless Steel Rotary Dryer.
2—Link Belt, 7'5" x 25", 6'4" x 24', S.S. Louvre Dryers.

FILTERS

1—Oliver 6' dia. Horizontal Filter, 316 S.S.
1—Oliver 3' x 6' Steel Rotary Vac. Precoat Filter.
1—Niagara #370-38 Filter, 370 sq. ft., 304 S.S.
2—#49 Vallez Rotating Pressure Filters, 738 sq. ft.
1—Oliver 5'3" x 8' Steel Rotary Vacuum, vaporite housing.
1—Sparkler 33S28 Filter, 150 sq. ft., 304 S.S.
1—Feinc 5' x 6' Stainless Steel Rotary Vacuum Filter.
2—#10 Sweetland Filters, 27 leaves, 4" centers, 250 sq. ft.

MISCELLANEOUS

1—Raymond 10' dia. Single Whizzer Separator.
2—Bantam Mikro Pulverizers, S.S.
1—Ross 6" x 14" Three Roll Mill.
3—Swenson Walker Continuous Crystallizers, 24" x 30' sections.
2—Robinson Sifters, 40" x 84", Stainless.
3—Robinson Gyratory Sifters, 30" x 104", Quadruple Deck.
8—Stokes; DD2, DDS-2, T, "R", and "F" Tablet Presses.
4—Nash Vacuum Pumps; H6, TS7, #2.
25—Chlorimet, Durimet and Duriron Centrifugal Pumps, 1½" to 6".

Partial List of Values — Send for Complete Circular

TEXAS OFFICE: 4181 San Jacinto Street, Houston 4, Texas — Tel.: JAckson 6-1351

BRILL EQUIPMENT COMPANY
35-61 JABEZ ST., NEWARK 5, N.J. Tel.: MArket 3-7420

LIQUIDATION

FELDSPAR PLANT

MANCHESTER, CONN.

19—Abbe Eng. 6′ x 8′ pebble mills, 30 HP motor, drive, dust hoods.

2—Hardinge 7′ x 36″ conical pebble mills.

1—Allis Chalmers 6′ x 18′ pebble mill.

2—Symons 3′ shorthead cone crushers, 50 HP.

2—Buchanan 13″ x 24″ jaw crushers, 50 HP.

1—Christie 4′6″ x 45′ long rotary dryer.

1—Pangborn dust collector, 15 HP exhauster.

1—Dings magnetic separator.

5—Bucket elevators, up to 40′ high.

SEND FOR CIRCULAR

1—Tolhurst 48″ susp. centrifugal, T304 SS perf. basket.

2—Sharples #C-20 Super-D-Hydrators, T316 SS.

5—A.T.&M. 40″ T304 SS Suspended centrifugals, 40 HP motors. (Solid or perf. basket.)

17—Sharples #AS-16 Super centrifugals, Inconel bowls & covers, 3 HP TEFC motors.

2—4′ dia. spray dryers, T304 SS, pilot size, elec.

2—Mikro #3W pulverizers, UNUSED.

1—Niagara #510-28 filter, 510 sq. ft., T316 SS.

1—Alco 110 sq. ft. vertical leaf filter, T316 SS.

2—Oliver 5′3″ dia. x 3′ face rotary vac. filter, precoat, T316 SS. ASME 30# pressure housing.

1—Oliver 5′3″ dia. x 8′ face rotary Vacuum filter—UNUSED. Steel construction.

75—T316 SS heat exchangers & condensers: 2000 sq. ft. down to 30 sq. ft.—All sizes.

1—Standard 3′ x 23′ rotary dryer, ¼″ welded shell.

1—Ross 6″ x 14″ 3-roll hi-speed mill, 5 HP.

1—2500 gal., T316 SS pressure tank, 70# WP, 7′ dia. x 7′ high, ¼″ shell & dished heads. 3 HP agitator.

1—J. H. Day 30 cu. ft. jktd. ribbon mixer, T304 SS.

1—Sprout-Waldron 325 cu. ft. ribbon mixer, UNUSED.

68—Baker Perkins #17, 200 gal. dbl. arm jktd. mixers.

2—96″ dia. Vulcan T316 SS bubble cap columns, 30 trays on 12″ centers, 272 caps per tray.

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Market Researchers to Meet

Western Chemical Market Research Group has called a meeting for February 18 at the Marines' Memorial Club in San Francisco. Richard P. Conlon, president and director of Conlon Associates, San Francisco, will deliver an address on "Chemical Opportunties in Asia."

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2—Baker Perkins Stainless Steel, 2 arm, jacketed, vacuum, hydraulic tilt, 150 gal—40 HP, 100 gal—50 HP.
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PMA Leader Replies to Critics: More Drugs

—Continued from page 4

of drug products have remained almost stationary in the past dozen years, while most commodities have risen sharply.

A study of drug price changes over the past eight years thows that nearly two-thirds of the (2,322) have been reductions, while only one-third (1,226) were increases, he said. New drugs typically sell at lower prices as both production of and competition from similar compounds accelerate, he explained, citing corticosteroids, tranquilizers and broad spectrum antibiotics as examples.

At retail the price for the average prescription has lagged behind the increase in personal income over the past twenty years, he declared. "The average worker therefore puts in less time to earn the income to pay for his prescriptions now than he did before the age of chemotherapy."

'Drugs Are a Bargain'

"If you compare today's price with the prices of other commodities, or with the price of drugs twenty years ago, or with the ability of the average wage-earner to pay, prescription drugs are a true bargain."

The PMA chief was willing to grant that the drug industry must make a profit—a "good" profit—if it is to continue in business. He pointed up the need for this by explaining that drug making is "a growth industry, a high capital investment industry and a risk industry."

The he added: "It is highly doubtful that the industry could have made as much progress in the advancement of public health if it had lacked adequate profits to finance a big part of its own growth and also to attract and keep investors."

'Brand Is a Guarantee'

Touching on the controversy over doctors' use of brand names on prescriptions, Dr. Smith pointed out that a brand name is a manufacturer's guarantee of the purity, quality, potency and uniformity of the drug he sells.

"The consuming public itself historically shuns the purchase of items that the manufacturer is unwilling to lend his name to," Dr. Smith went on. "Why should anyone expect doctors, who hold the health and even the lives of patients in their hands, to do otherwise?"

He said there is an impression being made that doctors are being subjected to "hard-sell" advertising of an irresponsible nature.

"Nothing," he declared emphatically, "could be further from the truth!"

Charges have been made that detailmen for pharmaceutical companies are "hardly more than door-to-door salesmen," Dr. Smith explained. Then he went on to refute this as disregarding the intelligence of doctors, who are always seeking new ways to serve their patients, but who have little use for sales pitches.

"But if the public is being misled as to the importance of advertising and detailing, physicians certainly are not. An exhaustive survey of the doctors' opinions made for the American Medical Association in 1958 effectively refutes those who decry the value of advertising and detailing of ethical drugs.

"Asked which sources of information about new drugs were personally most important to them, the physicians overwhelmingly named detailmen first and advertising second. Detailmen got 68 percent of the vote and medical journal ads 32 percent. Direct mail advertising ran third with a vote of 25 percent."

"The medical profession and the pharmaceutical industry," Dr. Smith added, "have one overriding objective in common: to alleviate misery and pain and to prolong life. Advertising, promotion, and detailing are quite simply an economical and effective way of speeding that process. Those who criticize these techniques would more productively devote their time to suggesting alternatives for them."

Oils, Fats and Waxes

—Continued from page 57

Lard—Interest in prompt needs was light. Cash lard was slightly higher at 8.45c. per pound, drums, Chicago.

Tallow—Trading lagged and better grades were easier and declined ⅛c., except No. 1 and No. 2. Offers continued light. Bleachable fancy was quoted at 5⅝c. per pound, tankcars, delivered; prime, 5⅜c.; special, 5⅛c., and No. 1, 5c., same basis. Edible tallow was unchanged at 7¾c., same basis. Guaranteed fancy was lower at .720c. per pound, drums, f.a.s. and .620c. bulk, f.o.b.

Waxes, Vegetable

There was no improvement in the tight candelilla wax market, in fact the situation was tighter. Crude was practically bare of the market and sales of small lots were reported made up to 74c. per pound. Light stocks of refined pure were boosted to 67c. per pound and orders were confined only to regular customers. Offers from Mexico continued nil and there was no indication as to when the situation there will improve.

Trading in carnauba grades was spotty and restricted to actual needs. Fatty grades were unchanged and quite steady, while yellows were easier and off 4c. to 5c. per pound. No. 1 yellow Ceara dropped to $1.05 to $1.07 per pound, spot and Parnahyba to $1.08 to $1.10, same basis.

Beeswax was quiet and unchanged as were other vegetable waxes.

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Trade Name Chemicals

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peratures should be avoided when processing drying goods.

Where the goods have been wet from previous operations, Burkart-Schier recommends that they be extracted before entering the flameproofing bath. This is done to avoid excessive dilution of bath and to assure even saturation with the flame retarding solution. Concerning extraction after flameproofing, the company says it is desirable to extract in the usual way.

According to Burkart-Schier, there is another modification trade named **"Fire Retardant RCW."** This is offered with a wetting agent already incorporated into the product. Finally, the company advises that the resistance of **"Fire Retardant RC"** to fire is not retained after washing or leaching with water. It is said to have good resistance to dry-cleaning, however.

Ion Exchange Resins

A definition of ion exchange would be reversible exchange of ions between a solid material and a liquid without any real change in the makeup of the solid. The solid represents the ion exchange material or what is called the resin particle. An ion exchange resin is best described as being an elastic, three-dimensional hydrocarbon network to which a number of ionizable groups are adhered.

Ion exchange resins find their widest use in water treatment, but also are used in chemicals, drugs, beverages, food products, milk products, glue and petroleum products. Nowadays the removal of mineral salts, both positive and negative ions, is a practical and widely used procedure in water treatment.

Rohm & Haas Company has on the market a group of ion exchange resins trade named **"Amberlite."** These are described as being either bead-like or granular particles, approximately one-half millimeter in diameter. The fixed ionic groups are part of the resin structure itself while the mobile ions of opposite charge wander throughout the resin interstices.

The company's **"Amberlite IR-120"** is said to be a polystyrene base, high capacity, strongly acidic, sulfonic acid type cation exchanger. It comes in bead form of 16 to 50 mesh particle size. In **"Amberlite IR-120"** only the cations are free; the anionic portion of the resin molecule is so large that it cannot dissolve in water and thus is not free.

Describing a water softening process, **Rohm & Haas explains that hard water is allowed to seep down through a column filled with "Amberlite IR-120." The calcium and magnesium ions of the water are said to put into motion the ion exchange which gathers in these ions and releases the softness producing sodium ions. Rohm & Haas says that one advantage of "Amberlite IR-120" is the fact that it can carry out millions of these transactions simultaneously over long periods of time before its supply of sodium ions needs replenishment.**

Discussing another example of the prowess of the **"Amberlite"** ion exchange resins, Rohm & Haas suggests **"Amberlite IRA-10"** for reducing the alkalinity of a solution, or rather to make it less basic. This is a polystyrene quaternary amine type strongly basic anion exchange.

Rohm & Haas explains that alkalinity, resulting from the presence of hydroxyl ions, can be reduced by replacing the negatively charged hydroxyl ions with other anions which are not basic, such as chloride anions, or sulfate. The company goes on to say that what is required is to pass the alkaline solution through a bed or column of "Amberlite IRA-410" containing chloride anions. The alkaline hydroxyl anions or the water are replaced by non-alkaline chloride anions, and the solution is made less basic.

Other recent uses for the **"Amberlites,"** states Rohm & Haas, include use in the nuclear-powered Nautilus submarine; also they are used aboard the N.S Savannah whose launching opened the age of atomic propulsion in the shipping of commercial cargo.

Food Additives Question for Scientists

—Continued from page 3

migrate to the food or when it migrated in such small amounts as to be indiscernible to the unaided eye.

Mr. Flemming said that "It is our view that the amendment would not apply to color materials in food wraps that do not migrate from the wraps to the foods. Additionally, it is our view that the bill is intended to regulate substances that color or are capable of coloring foods to a degree apparent to the naked eye.

"Thus a component of food packaging that migrates into food but does not change its color in the ordinary sense of the term would continue to be regulated, if necessary under the food additives amendment and would not become subject to the proposed color additives bill."

The Pesticides Subject

On the subject of pesticides, the secretary noted that some fungicides used in fruit production not only protect trees against disease but also support natural plant processes so that the plant produces better color and finish in the fruit.

"It is our view," said the secretary, "that pesticide chemicals used in this way are not color additives within the meaning of the proposed legislation, and do not impart an artificial color to the raw agricultural commodity. Rather, they promote the development of the natural color of the product as a result of the normal physiological processes of the plant.

"The legislation which we drafted was not intended to apply to pesticide chemicals which enhance color by affecting or supporting natural plant processes and we would expect to continue regulating pesticide chemicals, if the bill is enacted in its present form, under the pesticide amendment and not the color additive.

Color Distinctions Asked

John G. Kuniholm of Hercules Powder Company, testifying for the Society of the Plastics Industry, told the committee that while the secretary's interpretation of the proposed law as to food wraps was welcome, the industry would prefer that the bill be amended so that the distinction between food colors and packaging colorants is clearly recognized.

MCA's hard position on the Delaney issue was expressed to the committee by Kenneth E. Mulford, as chairman of MCA's food additives committee, and represented something of a shift from an earlier understanding that the association intended to support the recommendations of the Certified Color Industry Committee on this matter.

This committee did not ask for deletion of the Delaney clause but proposed that it be modified and transferred to another part of the bill where its application would be discretionary (OPD (2/1/60).

Emphasizes MCA's Principle

Mr. Mulford told the committee that he wanted to emphasize the fact that MCA has always stood for the principle that nothing could be included in food which is in any way harmful to public health, and that the government has an obligation to protect the public from inadvertant use of harmful substances.

"We believe the food additives amendment of 1958 gave the government ample authority to provide this protection without the cancer clause that was included in it at the last minute. And we believe the proposed color bill, with the amendments we have proposed, would give equally ample authority without the cancer clause.

"In other words, not only do we believe such a clause is unnecessary but we believe this clause does not measure up to the standard of the rest of the proposed legislation and former legislation in this field, and furthermore it is scientifically questionable.

"We doubt the desirability of including an inflexible provision which denies discretion and scientific discretion. This is especially true in the absence of adequate scientific data showing it to be impossible to develop safe tolerance for the limited use of all beneficial substances which when used in excessive or exaggerated amounts may produce this disease. We should like to see questions concerning safety resolved by the findings of a group of competent scientists which can review all relevant data and make appropriate recommendations."

Amendments Suggested

Mr. Mulford proposed amendments to the bill that would make it clear:

- That substances okayed under the food additives law, whether this be because they are generally recognized as safe, because of prior sanction or approval, or by reason of a regulation resulting from a petition, should not have to be cleared under the color law.
- That incidental additives remain under the food additives law even though they may be color-utilized in the food wrapper with minor portions of the color migrating into the food, and this will be true whether the color is coaltar or not.
- That substances falling under the insecticide act and the pesticide chemicals amendment should not have to be cleared under a color additive law even though their use might result in improved natural color of fruits and vegetables.

Additive Extensions

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grant producers of these additives more time to furnish the required information.

The twelve food additives may be used under certain specific conditions for the next thirteen months, or until FDA takes one of three actions: (1) establishes tolerances for the food chemicals, (2) denies them, or (3) declares them harmless and exempt from the requirement of tolerances.

The agency has already exempted 182 food additives from the requirements of the law (OPD, 11/23/59), has sanctioned the use of 150 natural flavors (OPD, 1/25/60) and intends to circulate a list of fifty-one chemicals among qualified experts in the nation to support FDA's opinion that these materials may be used in food without harm (2/8/60).

The Twelve Additives Listed

Listed below are the twelve food additives given time extensions together with the limits within which they may be employed and the uses and restrictions specified by FDA:

Butylated hydroxyanisole and/or butylated hydroxytoluene—fifty parts per million (combined total), as an antioxidant in dehydrated potatoes.

Coumarone-indine resin—200 parts per million, in coating on citrus fruits.

Dibutyl phthalate—2.17 percent, in nitrocellulose-coated, heat-sealing cellophane for packaging foods.

Dicyclohexyl phthalate—2.17 percent, in nitrocellulose-coated, heat-sealing cellophane for packaging foods.

Glycerol mono-oleate (from chick-tested material or if prepared from ester-exchange process)—3.5 parts per million, in fluid milk as vitamin oil emulsifier.

Inorganic bromides—fifty parts per million, in processed foods from methyl bromide fumigation.

Maleic acid—0.40 percent, in nitrocellulose-coated, heat-sealing cellophane for packaging foods.

Oxystearin—1,250 parts per million, in salad oils as inhibitor.

Pentaerythritol tetrastearate—0.09 percent, in nitrocellulose-coated, heat-sealing cellophane for packaging foods.

Polymers of pimaric and abietic acids and/or rosin constituents—0.64 percent, in nitrocellulose-coated, heat-sealing cellophane for packaging foods.

Propylene glycol ether of methylcellulose—no limit, as a thickener, stabilizer, protective colloid, suspending agent, emulsifier and film-former in foods.

Titanium dioxide, NF—20 percent, in adhesives for food packages.

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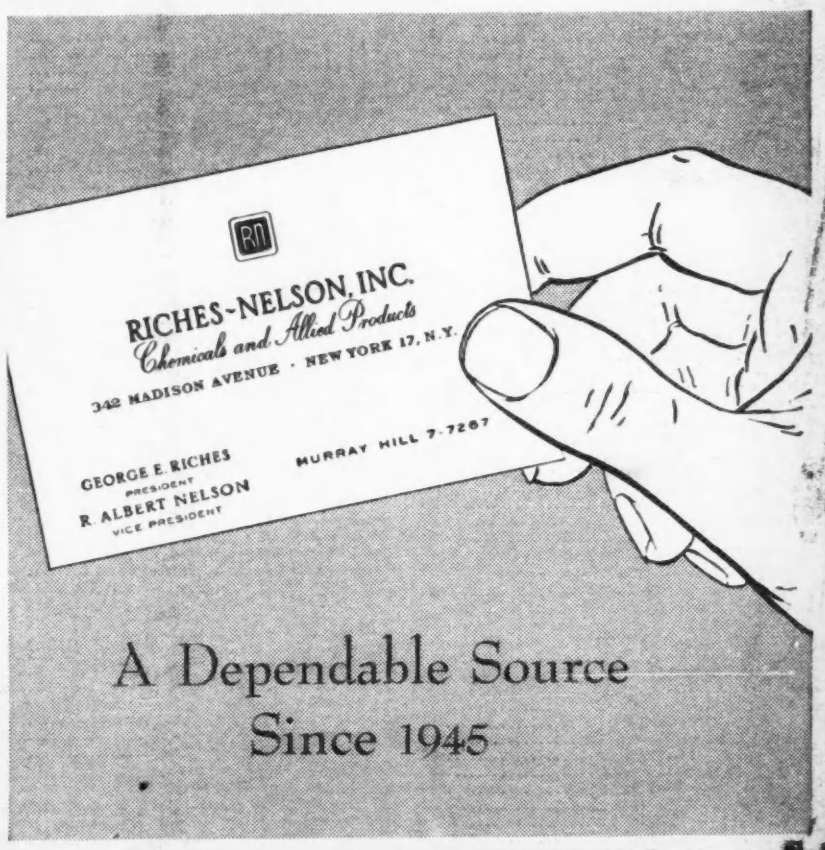

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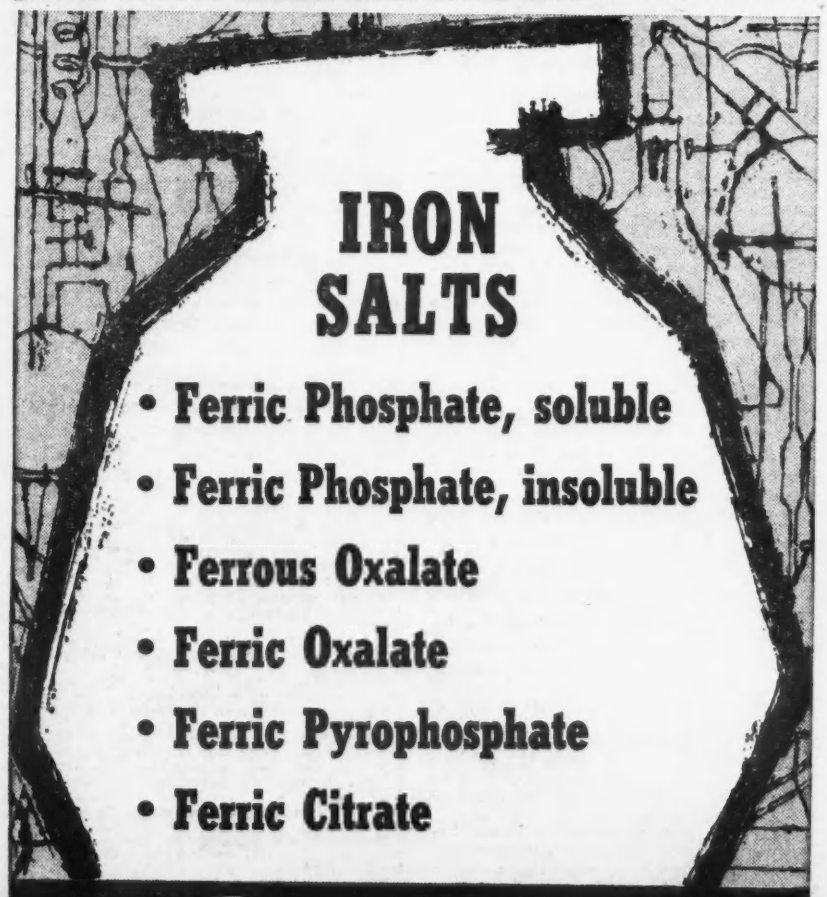

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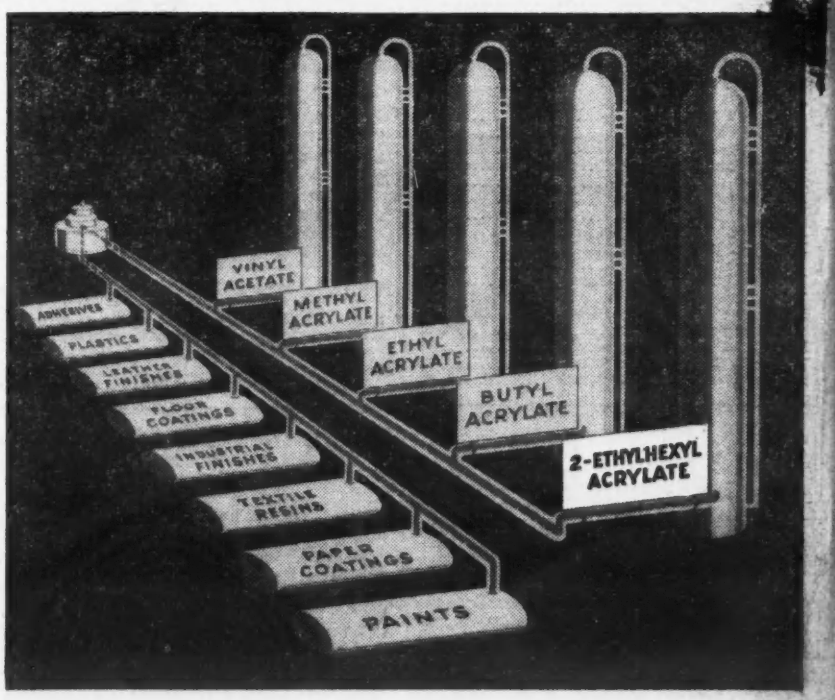

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